

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII**

In the Matter of the Application of)
HAWAII ELECTRIC LIGHT COMPANY, INC.) Docket No. 05-0315
For Approval of Rate Increases and)
Revised Rate Schedules and Rules.)

**RESPONSES TO
CONSUMER ADVOCATE
INFORMATION REQUESTS**

BOOK 2 OF 7

January 12, 2007

CA-IR-62

Ref: HELCO T-5, page 65, line 14, Shipman Staffing.

According to the testimony, “For the past five years Shipman Power Plant has been operated exclusively by operators from Hill Power Plant and Puna Steam Plant that work overtime.” Please provide the following information with respect to this statement:

- a. For each of the five years, provide the labor hours by RA associated with Hill Plant personnel used to operate Shipman.
- b. For each of the five years, provide the labor hours by RA associated with Puna Steam Plant personnel used to operate Shipman.
- c. Explain why projected Hill and Puna overtime hours in 2006 on HELCO-539 are not proportionately lower than in prior years, given the assumed addition of 9 new personnel to staff operations at Shipman and reduce or eliminate staffing with overtime labor from Hill and Puna.
- d. Provide complete copies of all calculations, workpapers and other documents associated with your response to part (c) of this information request, and which are supportive of any further ratemaking adjustments that may be required.

HELCO Response:

- a. Attachment 1 shows the labor hours by RA associated with Hill Plant personnel used to operate Shipman for the years 2001 to 2005.
- b. Attachment 1 shows the labor hours by RA associated with Puna Plant personnel used to operate Shipman for the years 2001 to 2005.
- c. As described in HELCO CA-IR-59, until June 2006, the newly hired staff was not qualified to operate the Shipman facility and the plant was operated by qualified operators from Hill Plant (“GH”) and Puna Plant (“GP”) on overtime. Additional expense was incurred to support the qualification training for the new staff, and for promotions created by filling the previously vacant Shipman Control Operator block. It is expected that there will be a reduction of overtime required from Hill and Puna RA’s to fill Shipman overtime, as shown

in CA-IR-1, HELCO T-5, Attachment 2, pages 10, 11 and 23. However, as described in HELCO's response to CA-IR-61 h., it is anticipated that continued overtime expense will be incurred to replace and qualify replacement staff for those who are planning to retire in the next few years. Thus, although the overtime attributable to manning Shipman has decreased, the amount of overtime being charged by Hill and Puna operators (see the June 2006 Overtime report in CA-IR-62, Attachment 2) equals and/or exceeds the 2005 recorded amount shown in HELCO-538. This trend is what was expected when labor was budgeted.

- d. See Attachments referred to above. Further ratemaking adjustments will not be required.

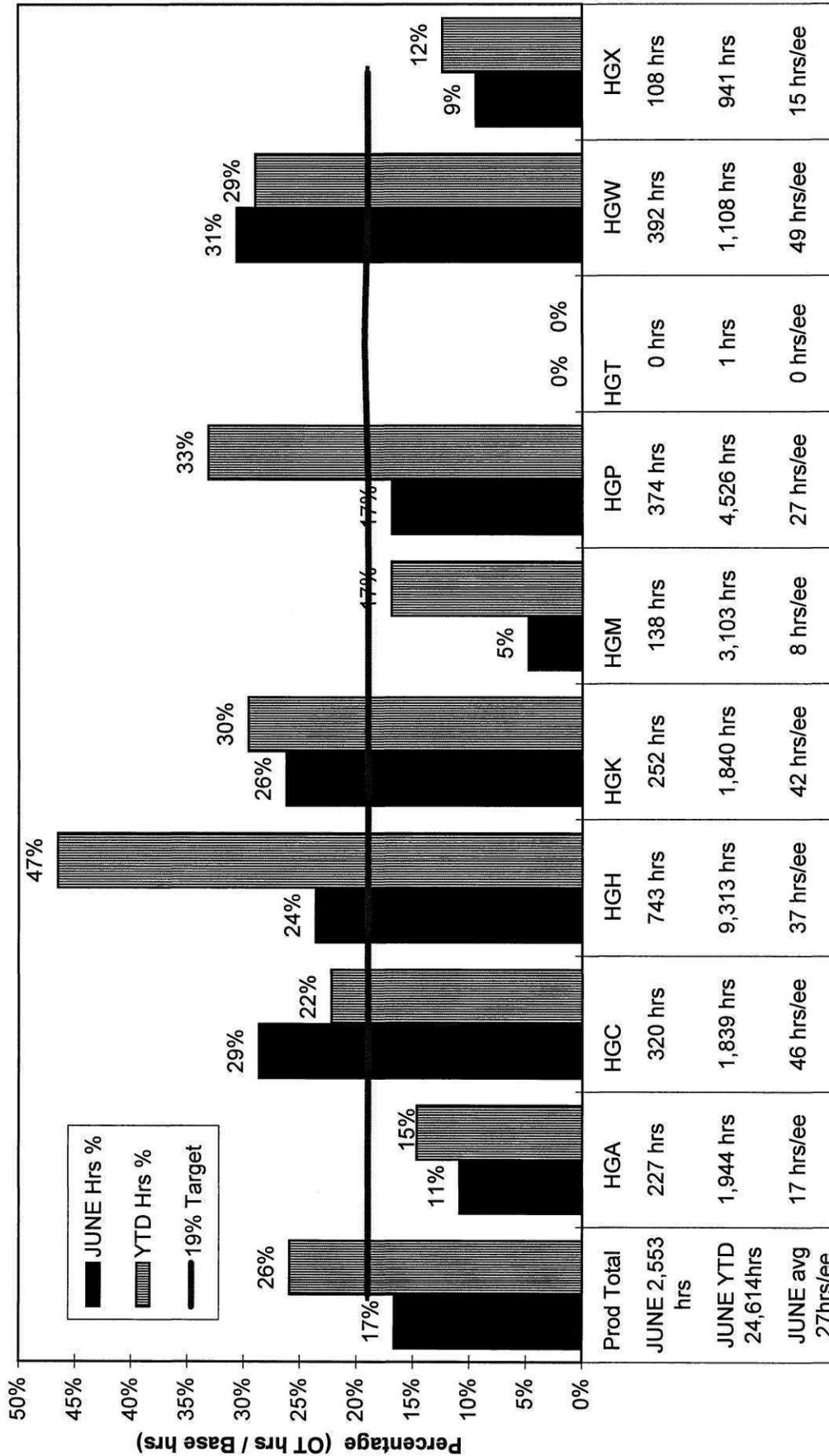
Hawaii Electric Light Company Inc.

2006 TEST YEAR
2001-2005 Labor Hours to Run Shipman

		Recorded								
RA	Location	2000	2001	2002	2003	2004	2005	2006	TY2006	
HGH	S01	761	-	-	-	-	-	-	-	
	S03	1,290	591	460	659	1,349	1,066	1,810	-	
	S04	1,920	456	547	409	1,638	1,317	1,625	-	
	SST	2,699	612	4,895	3,630	1,486	1,974	1,906	150	
HGH Total		6,670	1,659	5,902	4,698	4,473	4,356	5,342	150	
HGP	S01	191	-	-	-	-	-	-	-	
	S03	508	195	348	624	360	306	404	500	
	S04	1,163	206	167	499	374	322	339	500	
	SST	414	231	4,313	2,206	745	307	884	500	
HGP Total		2,276	632	4,828	3,328	1,479	934	1,627	1,500	
Grand Total		8,945	2,291	10,730	8,026	5,952	5,290	6,968	1,650	

Hawaii Electric Light Company, Inc.

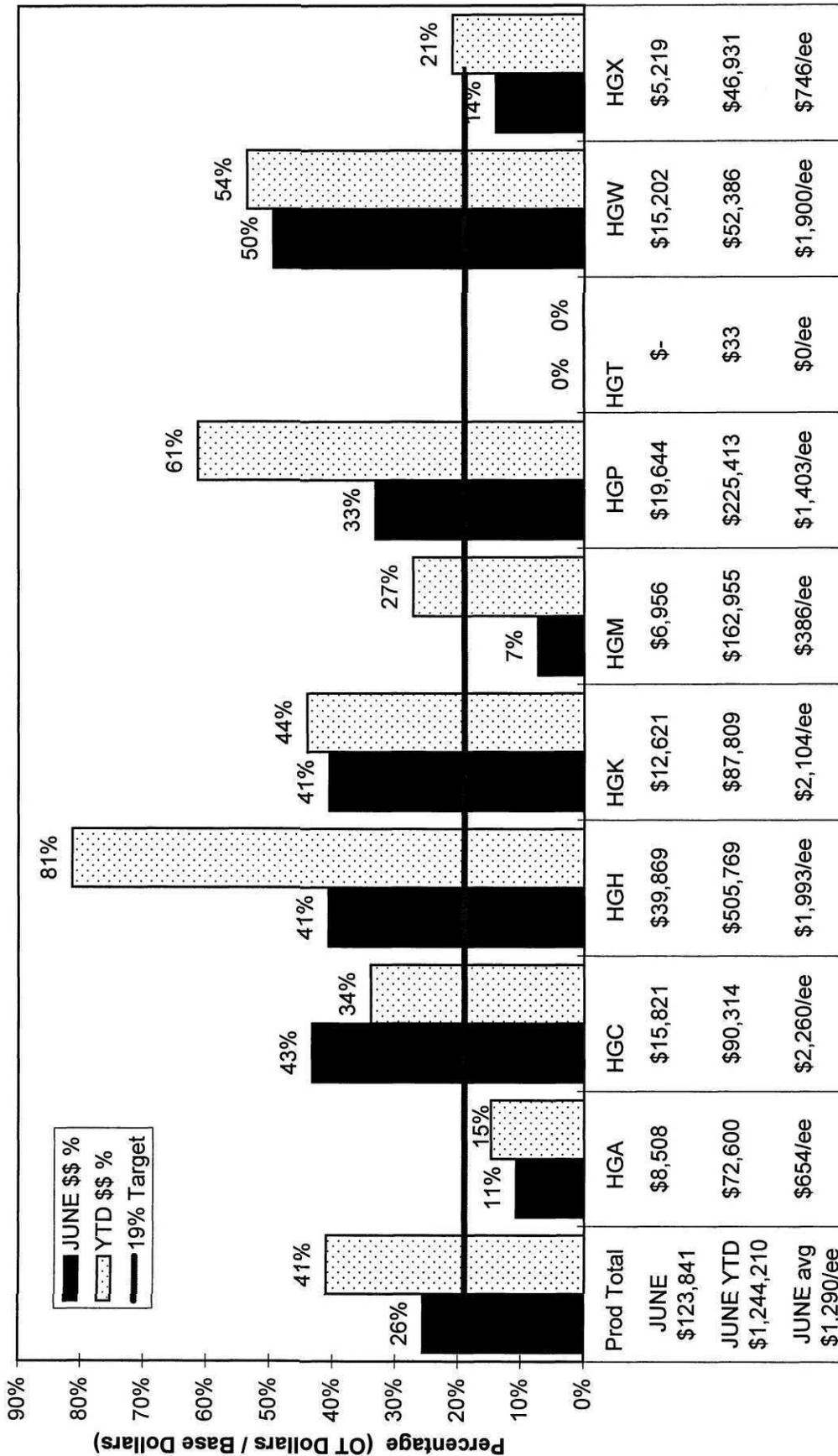
June 2006 & YTD Overtime Hours



By RA

Hawaii Electric Light Company, Inc.

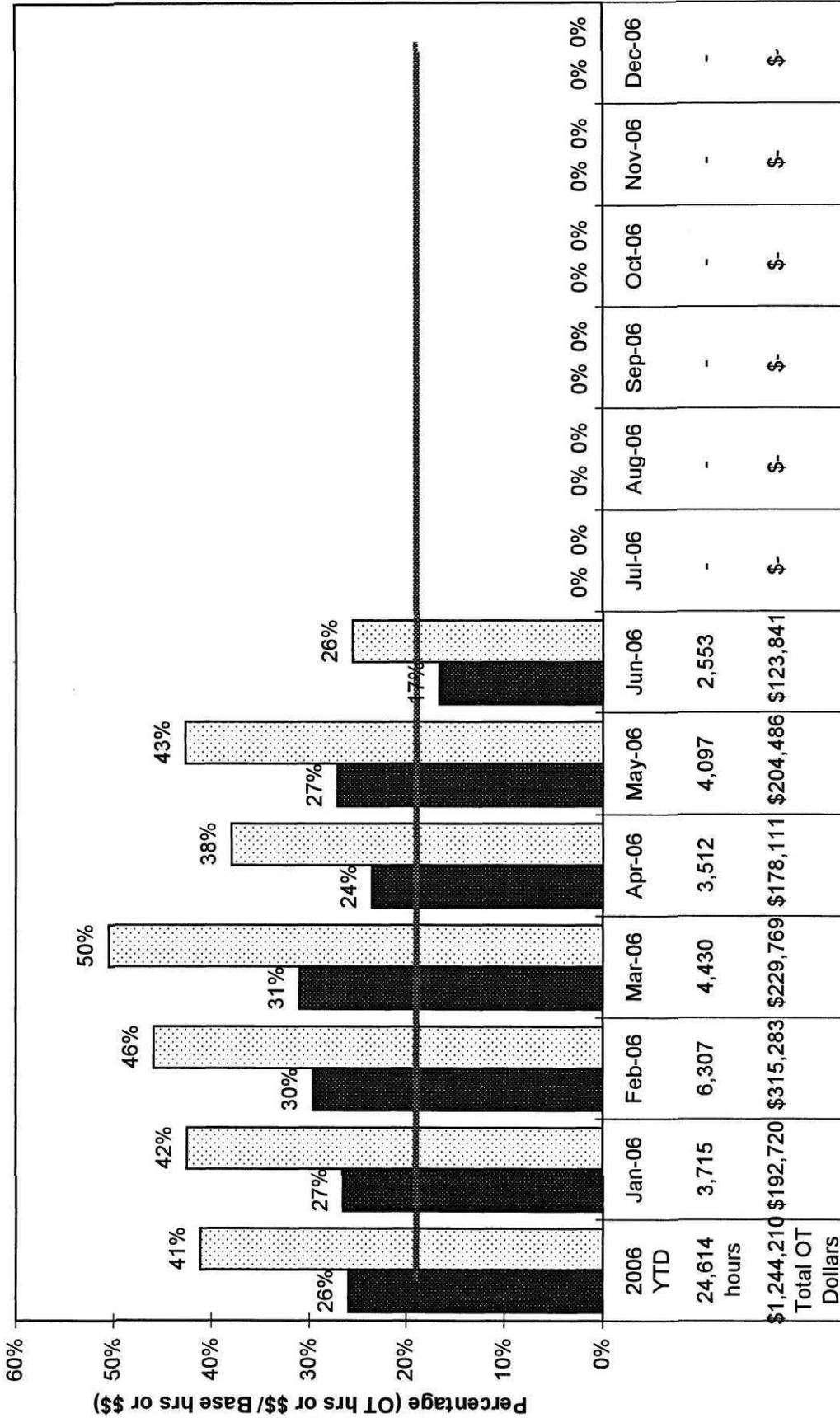
June 2006 & YTD Overtime Dollars



By RA

Hawaii Electric Light Company, Inc.

Percentage OT Hrs & Dollars By Month



OT Hrs %
 OT \$\$ %

Target 19%

By Month

CA-IR-63

Ref: HELCO T-5, page 26, line 15 and HELCO-540.

According to the testimony, "CT-4 became commercially available on May 25, 2004, and CT-5 became commercially available on June 30, 2004." HELCO-540 explains the proposed 48.3% increase in "material" cost in 2006 over 2005 at line 1 as, an increase that "is mainly attributable to the net impacts of the Keahole expansion and full operation for the year." Please provide the following information with respect to these statements:

- a. Explain whether or not Keahole was fully "expanded" by the installation of CT-4 and CT-5 throughout 2005, given the commercial availability of both new units in mid-2004.
- b. Provide copies of all studies, reports, analyses, workpaper and other documents associated with your explanation of increased material costs being due to the "Keahole expansion and full operation for the year."

HELCO Response:

The tabulated data provided in HELCO-540 was incorrectly based on a report that was generated on 12/23/2005 and is not a report that was filed for this Docket. A budget recycle occurred in late January 2006 and therefore the final rate case information is different from the report incorrectly used. The data files used for the corrected HELCO-540 (Attachment 1) were generated on 5/5/2006 and were provided to the Consumer Advocate and the Commission on May 9, 2006. Corrections were made to each column listed in Attachment 1. The "Total" amounts remain unchanged.

The title of Column B has been revised to clarify that the amounts reflect the 2006 budget amounts, and not "test year estimates." The differences between the budget amounts and the 2006 test year estimates are based on the budget adjustments and normalization adjustments identified in HELCO T-5 on pages 51-52 (Other Production non-labor budget adjustments) and 56-57 (Other Production non-labor normalization adjustments). These adjustments were made at

the NARUC account level, and not at the activity level. In addition, HELCO has identified other adjustments to the test year non-labor estimates in other IR responses.

The revised amounts in Attachment 1 show Other Production Operation Non-Labor material expense of \$1,011,000 for the 2006 budget versus the 2005 actual amount of \$559,000, for a difference of \$451,000. Material expense, as discussed in HELCO T-5, pages 69-70, includes “consumable items such as chemicals used for boiler, waste and circulating water treatment, lubricants, gases, instrument chart paper, city water and sewer charges, and office supplies.” The difference is attributable to an overestimation of boiler chemical, demineralized chemical and lube oil expenses in the test year. The Company is adjusting downward the test year estimate for these items by \$249,280 as shown in the response to CA-IR-447 (T-5).

- a. Not applicable. The variance explanation has changed as explained above.
- b. Not applicable. The variance explanation has changed as explained above.

OTHER PRODUCTION OPERATION NON-LABOR EXPENSE
2005 ACTUAL VS. 2006 BUDGET
(\$ Thousands)

	(A)	(B)	(C)	(D)	Reason
<u>EXPENSE</u>	<u>2005 ACTUAL</u>	<u>2006 BUDGET</u>	<u>CHANGE</u>	<u>%</u>	
1 Material	\$ 559	\$ 1,011	\$ 451	80.7	See notes 1, 2 and 3 in CA-IR-63.
2 Outside Srvcs	\$ 2,199	\$ 1,680	\$ (519)	(23.6)	Decrease is due to large GAM projects which occurred in 2005, and will not be reoccurring in 2006.
3 Intercompany Charges	\$ 517	\$ 718	\$ 202	39.0	Increase is mainly attributed to the net impacts of environmental compliance services to be provided by HECO. It is projected that HECO will be charging over \$130,000 more than they did in 2005 for environmental services regarding increased air, wastewater and noise permitting issues for Keahole and Hill plants.
4 Labor Related On-Cost	\$ 1,354	\$ 2,425	\$ 1,071	79.1	Labor related on-cost is comprised of energy delivery on-cost, production on-cost, corporate administration on-cost, employee benefit on-cost, and payroll taxes on-cost. The increase in labor on-cost expenses is primarily due to the increase in staffing levels in Production Operations. Refer to Mr. Paul Fujioka at HELCO T-9 for further discussion.
5 Reclassification of On-Cost	\$ (1,298)	\$ (2,443)	\$ (1,145)	88.2	
6 Other	\$ 94	\$ 135	\$ 41	44.0	Mainly due to transactions in the 900 expense element which was discussed in response CA-IR-78.d and 78.e.
7 Adj & Normalizations	\$ -	\$ 6	\$ 6	0.0	Adjustments and normalizations were covered earlier in my testimony. (See HELCO-532 and HELCO-533.)
8 TOTAL	<u>\$ 3,425</u>	<u>\$ 3,533</u>	<u>\$ 108</u>	<u>3.2</u>	

Note: Totals may not add exactly due to rounding.

CA-IR-64

Ref: HELCO T-5, page 55, Waiiau and Puueo Penstock Repairs.

According to the testimony, “The cumulative increase of \$350,000 for Waiiau and Puueo penstock repairs are due to the immediate need for inspection and maintenance of the entire penstock right-of-ways....” Please provide the following information with respect to this adjustment:

- a. Describe and quantify all comparable penstock-related work done and expenses incurred in each of the past 5 years at each of these hydro units.
- b. Explain whether or not HELCO expects to perform \$350,000 of annual, ongoing expensed penstock work at these two units.
- c. State whether or not any normalization was proposed for hydro penstock repairs in the Company’s filing, and the basis for making (or not making) any such normalizations.
- d. Provide the monthly expenditures in 2006 for the referenced work at each unit, by NARUC Account and expense element.

HELCO Response:

- a. The last penstock-related work was done in 1996 to install concrete liners at Puueo and Waiiau. Otherwise, a few leaks were repaired. Nothing comparable to what is currently budgeted has been done in the last five years.
- b. HELCO does not expect to spend \$350,000 annually for penstock maintenance once the initial 2006 work is completed. Some areas of the Puueo penstock were inspected by HELCO engineers as part of the recent Puueo rehabilitation project and were determined to be in need of maintenance. Subsequently, additional areas were inspected at both Puueo and Waiiau and it was determined that maintenance was needed for not only the Puueo penstock but for the Waiiau pipeline as well. The work will consist of right-of-way clearing, repairs to air release vaults and piping, road repairs, repairs to wooden and concrete trestles, stop log repairs, bridge repairs, runner repairs, and any coating repairs to the exposed sections of the

pipelines. Once these repairs are made it will be several years before similar work to this extent will need to be done. Further, \$100,000 has been budgeted beginning in 2008 and forward for maintenance.

- c. A normalization adjustment was not proposed for hydro penstock repairs in the Company's filing. Generally, the intent was to normalize emissions fees and overhaul expenses, not to attempt to normalize items at the project or maintenance activity level, since the specific projects undertaken, or facilities that are maintained, may vary from year to year.
- d. See page 3 of this response. Although the amount expended through June was limited, the Company still expects to expend a sizable amount for penstock repairs by the end of 2006.

Hawaii Electric Light Company, Inc.

2006 TEST YEAR
2006 Monthly Expenditures for Penstock Repairs

<u>NARUC</u>	<u>Expense Element</u>	<u>Recorded</u>						
		<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	
542230	150 - Labor	-	-	-	\$ 1,151.55	\$ -	-	Puueo
542230	423 - Payroll Taxes				641.94			Puueo
542230	201 - Mat'l Issues & Purchases					2,331.33		Puueo
542240	150 - Labor				767.70			Waiau
542240	423 - Payroll Taxes				427.96			Waiau
Total		-	-	-	\$ 2,989.15	\$ 2,331.33	-	

CA-IR-65

Ref: HELCO 540, line 2 and HELCO-523.

According to the explanation given for increased “Intercompany Charges, “It is projected that HECO will be charging over \$130,000 more than they did in 2005 for environmental services regarding increased air, wastewater and noise permitting issues for Keahole and Hill plants.” Please provide the following information with respect to this statement:

- a. Identify and quantify the specific changes in work being done by HECO in these areas.
- b. Provide HECO total actual and projected costs by RA for each year from 2003 through 2006 year-to-date that are relevant to such allocations.
- c. Provide workpapers showing the allocations of the total HECO departmental costs by RA for each year from 2003 through 2006 year-to-date to correspond to the amounts provided in response to part (b) of this information request.
- d. Provide additional supporting information and calculations underlying the amounts shown in the response to CA-IR-2, Attachment 2G, page 1 for “Environmental Support.”
- e. Provide the monthly actual Project 001 “Environmental Support” charges from HECO for all available months to-date in 2006.
- f. Are any of the regulations that are summarized on HELCO 523 newly effective or significantly revised since January 1, 2003?
- g. If your response to part (d) of this information request is affirmative, please explain and provide specific reference to such regulation changes.
- h. Are there any new or revised regulations for which HELCO will be required to incur additional costs in the future?
- i. If your response to part (f) of this information request is affirmative, please explain and quantify all planned activities that will be necessary to address the new or revised regulations, the timelines for the completion of such planned activities and the anticipated new costs that will be incurred.

HELCO Response:

- a. The following correction needs to be made to the reason for increased “Intercompany Charges.” The amount attributable to environmental services is an increase of \$111,000 and not the \$130,000 as originally stated. Thus “It is projected that HECO will be charging over

\$111,000 more than they did in 2005 for environmental services regarding increased air, wastewater and noise permitting issues for Keahole and Hill plants.”

Specific changes in work being done are directly related to, among other things, the expansion of Shipman and Keahole Plants related to responses f and h below.

- b. HECO total actual **and** projected costs by RA for each year from 2003 through 2006 year-to-date are:

Proj	Project	RA	2003	2004	2005	2006	YTD 08/6/2006
Projected Costs							
H0000043	Environmental Support	HGA	\$ 243,566	\$ 383,557	\$ 289,622	\$ 420,800	\$ 280,573
Actual Costs							
H0000043	Environmental Support	HGA	\$ 228,664	\$ 217,974	\$ 310,643		\$ 232,593

- c. See Attachment 1.
d. See Attachment 1, pages 1 to 3.
e. Monthly actual Project 001 “Environmental Support” charges from HECO are:

Proj	Project	RA	Jan 06 Actual	Feb 06 Actual	Mar 06 Actual	Apr 06 Actual	May 06 Actual	Jun 06 Actual	Jul 06 Actual	YTD Aug 6, 2006 Actual
Actual Costs										
H0000043	Environmental Support	HGA	\$ 15,105	\$ 45,185	\$ 44,957	\$ 410	\$ 70,423	\$ 24,926	\$ 3,733	\$ 27,853

- f. Yes, primarily at the Keahole generation station that included the additional Covered Source Permit for units CT-4 and CT-5 and also the revised Covered Source Permit for unit CT-2. Both CSP’s required additional monitoring and source testing. It was also determined that Keahole should be SPCC regulated which required additional procedural changes along with the development of a comprehensive Facility Spill Response Plan (FSRP). The Department of Transportation-Office of Pipeline Safety (DOT-OPS) has also increased the training and record keeping requirements for the HELCO fuel oil pipeline. All of these changes have

required additional time and effort on the part of the HECO Environmental Department to provide the necessary oversight for such items as:

Comprehensive Environmental Response Compensation and Liability Act (CERCLA)

All Appropriate Inquiries Regulations This new EPA regulation (effective November 11, 2006) established new standards to conduct Environmental Site Assessments (or due diligence/risk screening) for any type of property transaction to provide landowner liability protection under CERCLA. This applies to the purchase, lease or sale of properties. These new standards for conducting property transaction due diligence investigations will result in increased outside service (i.e., consultant) costs.

State DOH revised Environmental Action Levels - DOH established new guidelines for spill cleanups (effective June 1, 2005) that resulted in additional effort to obtain DOH approvals for spill cleanups. This will increase manpower and material requirements to close out spill sites.

Emergency Planning and Community Right to Know Act

Toxic Release Inventory - In 2005, the de minimis threshold for naphthalene was lowered from 1.0% to 0.1%. Naphthalene is a natural component of petroleum fuels, and the changed threshold triggered reporting of naphthalene for Hill, Puna, Keahole and Waimea. This increased the time and effort needed to complete TRI reporting for these facilities. This new threshold triggered TRI reporting for Waimea, which previously did not require TRI reports.

Resource Conservation and Recovery Act

Universal Wastes - Mercury-containing equipment were included as a universal waste starting on August 5, 2005. Mercury-containing equipment includes thermostats,

barometers, manometers, temperature and pressure gauges, and mercury switches. By classifying mercury-containing equipment as universal waste, EPA now allows for longer accumulation time of this type of waste at the facilities, which facilitates more cost-effective disposal of the waste. Previous to this rule, mercury-containing equipment was classified as hazardous waste, which imposed shorter storage time at facilities and regular inspections while in storage. No significant change in labor or material requirements is expected.

Cathode Ray Tubes (CRTs) - CRTs were excluded from the definition of solid waste if it will be sent for recycling. This exclusion was published as a final rule on July 28, 2006. This rule allows for unlimited storage and accumulation of CRTs at HELCO facilities, which will result in more cost-effective recycling of CRTs. Previous to this rule, CRTs would be classified as a waste, and conservatively a hazardous waste, which would invoke time limits on storage at facilities, inspections, and increased cost of disposal. No significant change to labor or material requirements.

Department of Transportation Hazardous Materials On March 25, 2003, DOT published a final rule which required that hazardous material shipments requiring placarding must develop and implement a DOT hazardous materials security plan, and applicable employees must be trained on this security plan. HELCO falls into this category, and is undergoing significant efforts to develop and maintain a hazardous materials security plan and training program.

Clean Water Act

CWA Section 316(b) - Major regulations for existing cooling water intake systems were finalized in September 2004. While these new regulations significantly impacted HELCO power plants they do not apply to HELCO facilities.

Spill Prevention Control and Countermeasure (SPCC) Regulations - SPCC regulations were revised in 2002 to include oil-filled electrical equipment (e.g., transformers). This regulation was revised several times since, most recently February 17, 2006, and requires that facilities be in compliance with SPCC requirements by October 31, 2007. This requires that HELCO prepare, implement and maintain SPCC plans, and conduct routine inspections and recordkeeping for many substations and base yards. Program compliance will require additional labor and material costs.

g. Not applicable.

h. There is a possibility that the Hill generating station could be required to be SPCC regulated. There will also be a new air permit for the Keahole station when the Heat Recovery Steam Generators with Selective Catalytic Reduction and Steam Turbine #7 are installed to utilize the waste exhaust heat from existing units CT-4 and CT-5, planned for completion in 2009. Also see response to f above. In addition, the HECO Environmental Department continues to monitor proposed new legislation, new regulations, compliance standards and permit requirements. For example, the following items are being tracked:
Water Pollution Program Enhancements Act of 2000 - We are tracking EPA/DOH's establishment of Total Maximum Daily Limits (TMDLs) for watersheds and impaired State waters. HELCO Shipman facility's NPDES permit could be affected by new TMDL standards (e.g., resulting in more stringent discharge conditions). DOH is expected to prioritize watersheds on Oahu, thus HELCO is not likely to be impacted by any new TMDL-related regulatory requirements for several more years.

EPA Effluent Guidelines for Steam Electric Utilities - In 2005, EPA issued a list of industry sectors, including steam electric utilities, that it identified for detailed studies in 2006. EPA

plans to conduct an evaluation to determine the adequacy of current guidelines and standards of these industrial sectors to ensure they are in alignment with pollution prevention and treatment technologies. In worst case, additional effluent-related standards or best available technologies could be developed for steam electric utilities.

DOH Source Water Protection Program - On September 3, 2005, DOH announced that assessment reports for the SWAP have been completed and the next step is rulemaking to protect critical sources of drinking water. This could potentially impact HELCO's injection well activities at Puna and Hill. A compliance schedule has not been established at this time.

- i. See discussion to response f.

03/29/05 16:13 FAX 808 543 7519

WARD 3RD FLOOR FAX

002

INTERCOMPANY SERVICE FORM

COPY

Check one:

- Recurring
 Non-Recurring

Period of Service Requested (check one):

- 2 years (non-project/non-program)
 5 years (project/program)

Date of Request: 3/2/2005

1) Receiver Information:

Subsidiary (or Other HEI Affiliate) Company Name: HELCO
Department/Division: Production Department
Contact Person's Name: Karie Klein, Fiscal Administrator
Contact Person's Phone No & Mail Stop: 808-969-0419, HHL-GA
Contact Person's RA: HGA

Codeblock:	RA	Act	Loc	Ind	Proj	Subproj/work order (if any)
	various	various	various	various	H0000043	various

Request Approved by: Dan Giovanni, Manager, HELCO Production Department

SCOPE OF SERVICE OR WORK (See Instructions):

HECO will provide environmental services, including but not limited to Air, Wastewater, Noise Compliance, etc, for all HELCO plant locations.

MAJOR PROCESS THAT THIS SERVICE SUPPORTS:

Manage Environmental Permitting & Compliance

LINE ITEM: (to be used by Provider in Pillar)

Receiver RA	Request No.	Short Description
HGA	001	Intercompany Charges - Environmental

2) Provider Information:

Company Name: Hawaiian Electric Company, Inc.
Department/Division: Environmental Dept / All Divisions
Contact Person's Name: Bert Morikuni
Contact Person's Phone No & Mail Stop: (808) 543-7549 / WA3-YA
Contact Person's RA: PYA

Codeblock:	RA	Act	Loc	Ind	Proj	Subproj/work order (if any)
	various	various	various	various	various	

Approved By: Bert Morikuni

ESTIMATES (To Be Provided By PROVIDER)(See Instructions - Please attach details):

	TOTAL YEAR 2006	TOTAL YEAR 2007
Labor	\$246,000	\$246,000
Overheads	\$123,200	\$123,200
Non-Labor	\$51,600	\$51,600
Total Costs	\$420,800	\$420,800
Labor Hours	7,171	7,171

*Per Bert on 4/12/05,
use the same amount
as PYA.*

3) Receiver Information (To be completed after estimates are received):

Date received: _____
Estimate Accepted and Approved by: _____

03/29/05 16:13 FAX 808 543 7519

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003

Env-Helco-Production

Environmental Services for Helco Production			
		Standard	
Labor	Labor	Labor	
Resp. Area	Hours	Rate	
JA	6	\$54.59	\$327.54
JA	310	\$33.62	\$10,422.20
JB	2,634	\$37.36	\$98,406.24
JC	2,000	\$31.07	\$62,140.00
JW	2,221	\$33.62	\$74,670.02
	7,171		\$245,966.00
Overheads		Overhead	
		Rate	
Payroll Taxes		8.42%	\$20,710.34
Employee Benefits		\$7.88/hr	\$56,507.48
Non-Productive Wages		\$3.85/hr	\$27,608.35
Corp Admin		\$2.57/hr	\$18,429.47
			\$123,255.64
Non-Labor			
Interisland Travel + Parking			\$17,760.00
Materials			\$18,450.00
Outside Services			\$600.00
Outside Services-Environmental			\$13,800.00
Meals & Entertainment			\$970.00
Non-Labor Total			\$51,580.00
Total Costs			\$420,801.64

03/29/05 18:13 FAX 808 543 7519

WARD 3RD FLOOR FAX

001

Revised

Post-It® Fax Note	7571	Date	3/29/05	# of pages	3
To	Karie Klein	From	Bert Marikuni		
Co./Dept.		Co.			
Phone #		Phone #			
Fax #	969-0425	Fax #			

HAWAII ELECTRIC LIGHT COMPANY							Proj H043 Heco Env.xls			
PRODUCTION DEPARTMENT							4/2004			
Intercompany Charges - Environmental										
Operating Forecast 2005 - 2006							2005		2006	
							HECO Fcst		HECO Fcst	
Description	Naruc	RA	Act.	Loc.	Ind.	Proj	EE	Recd 3/04	Recd 3/04	
Operate/Mon Fuel Feed System										
- Hill	502220	HGA	241	RST	NE	H0000043	550	14,514	14,804	
Conduct Envir Training										
- Hill	500220	HGA	788	RST	NS	H0000043	550	2,373	2,422	
- Kea	546280	HGA	788	CNS	NS	H0000043	550	7,188	1,703	
- Puna	500230	HGA	788	PST	NS	H0000043	550	592	602	
- SHP - Wtr/Haz Mat	500210	HGA	788	SST	NS	H0000043	550	3,576	3,657	
- WMA - Air	546250	HGA	788	BNS	NS	H0000043	550			
Apply Obtain Air Permits										
- Shp	506210	HGA	865	SST	NE	H0000043	550	4180	0	
- Hill		HGA	865	RST	NE	H0000043	550	100	0	
- Puna	506230	HGA	865	P01	NE	H0000043	550			
- Kancelehua		HGA	865	ANS	NE	H0000043	550	100	0	
- CT3	549300	HGA	865	P03	NE	H0000043	550			
- Wma	549250	HGA	865	BNS	NE	H0000043	550			
- Keahole	549280	HGA	865	CNS	NE	H0000043	550			
- Disp Gen 24		HGA	865	D24	NE	H0000043	550			
- Disp Gen 25		HGA	865	D25	NE	H0000043	550			
- Disp Gen 26		HGA	865	D26	NE	H0000043	550			
- Disp Gen 27		HGA	865	D27	NE	H0000043	550			
Apply/Obtain Water Permits										
- Shipman	506210	HGA	866	SST	NE	H0000043	550	6,012	6,174	
- Hill	506220	HGA	866	RST	NE	H0000043	550	4,010	4,116	
- Puna (PST)	506230	HGA	866	P01	NE	H0000043	550			
- Waimea	549250	HGA	866	BNS	NE	H0000043	550			
- Keahole	549280	HGA	866	CNS	NE	H0000043	550	1,004	1,029	
Comply w/ Air Permits										
- Shipman	506210	HGA	875	SST	NE	H0000043	550	6,017	8,094	
- Hill	506220	HGA	875	RST	NE	H0000043	550	10,019	16,091	
- Puna (PST)	506230	HGA	875	P01	NE	H0000043	550	10,497	14,646	
- Kancelehua	549260	HGA	875	ANS	NE	H0000043	550	4,044	13,872	
- Waimea	549250	HGA	875	BNS	NE	H0000043	550	5,258	6,166	
- Keahole	549280	HGA	875	CNS	NE	H0000043	550	14,237	28,686	
- Disp Gen 24	549400	HGA	875	D24	NE	H0000043	550	1,837	1,927	
- Disp Gen 25	549410	HGA	875	D25	NE	H0000043	550	1,837	1,927	
- Disp Gen 26	549420	HGA	875	D26	NE	H0000043	550	1,837	1,927	
- Disp Gen 27	549430	HGA	875	D27	NE	H0000043	550	1,837	1,927	
- CT3	549300	HGA	875	P03	NE	H0000043	550	16,129	14,489	

HAWAII ELECTRIC LIGHT COMPANY							Proj H043 Heco Env.xls		
PRODUCTION DEPARTMENT							4/2004		
Intercompany Charges - Environmental									
Operating Forecast 2005 - 2006							2005		2006
							HECO Fcst	HECO Fcst	
							Recd 3/04	Recd 3/04	
Description	Naruc	RA	Act.	Loc.	Ind.	Proj	EE		
Comply Wastewater Permit									
- Shipman	506210	HGA	876	SST	NE	H0000043	550	29,463	29,154
- Hill	506220	HGA	876	RST	NE	H0000043	550	44,247	44,179
- Puna (PST)	506230	HGA	876	P01	NE	H0000043	550	14,759	14,696
- Kanoelehua	549260	HGA	876	ANS	NE	H0000043	550		
- Waimea	549250	HGA	876	BNS	NE	H0000043	550	1,239	1,264
- Keahole	549280	HGA	876	CNS	NE	H0000043	550	29,804	29,695
- CT3	549300	HGA	876	P03	NE	H0000043	550		
Comply Oil Permit									
- Shipman	506210	HGA	877	SST	NE	H0000043	550	4,528	4,609
- Hill	506220	HGA	877	RST	NE	H0000043	550	4,693	4,626
- Puna (PST)	506230	HGA	877	P01	NE	H0000043	550	4,998	5,293
- Kanoelehua	549260	HGA	877	ANS	NE	H0000043	550		
- Waimea	549250	HGA	877	BNS	NE	H0000043	550	1,071	1,088
- Keahole	549280	HGA	877	CNS	NE	H0000043	550	6,585	6,732
- CT3	549300	HGA	877	P03	NE	H0000043	550		
Comply w/ non oil permits									
- Shipman	506210	HGA	878	SST	NE	H0000043	550	3,354	3,440
- Hill	506220	HGA	878	RST	NE	H0000043	550	10,708	10,946
- Puna (PST)	506230	HGA	878	P01	NE	H0000043	550	6,902	7,061
- Kanoelehua	549260	HGA	878	ANS	NE	H0000043	550	402	412
- Waimea	549250	HGA	878	BNS	NE	H0000043	550	637	647
- Keahole	549280	HGA	878	CNS	NE	H0000043	550	2,559	2,612
- CT3	549300	HGA	878	P03	NE	H0000043	550		
Comply Permit/Noise									
- Shipman	506210	HGA	879	SST	NE	H0000043	550		
- Hill	506220	HGA	879	RST	NE	H0000043	550		
- Puna (PST)	506230	HGA	879	P01	NE	H0000043	550	1,837	965
- Kanoelehua	549260	HGA	879	ANS	NE	H0000043	550		
- Waimea	549250	HGA	879	BNS	NE	H0000043	550		
- Keahole	549280	HGA	879	CNS	NE	H0000043	550	4,638	965
- Disp Gen 24	549400	HGA	879	D24	NE	H0000043	550		
- Disp Gen 25	549410	HGA	879	D25	NE	H0000043	550		
- Disp Gen 26	549420	HGA	879	D26	NE	H0000043	550		
- Disp Gen 27	549430	HGA	879	D27	NE	H0000043	550		
TOTAL ENVIRONMENTAL								289,622	312,643
Source:HECO ICB forecast 3/04									

Heco Environmental Support - Recorded 1997 to 2003, Forecast 2004 - 2005												
Source: FSIW05R ICB 1997-1998, Piller 1999 - 2001, Estimate 2002-2003												
Account	Activity	1997	1998	ABM activity	H0000049 1999 recd	H0000049 2000 recd	H0000049 2001 recd	H0000049 2002 recd	H0000049 2003 recd	2004 Fcst 4/2003 estimate	2005 Fcst 3/2004 estimate	2006 Fcst 3/2004 estimate
Air Support	Activity 865 - Apply/Obtain Permits											
Shipman	506210 50626			865 SST	18					13,271	4,180	0
Hill	506220			865 RST				3,402	368		100	0
Puna	506230			865 P01				561				
Waimea	549250			865 BNS								
Kaunohou	549260			865 ANS								
Keahole	549280 54916			865 CNS	1,088	85		1,119		7,535	100	0
CT3	549300			865 P03				2,513				
Disp Gen 24	549400			865 D24								
Disp Gen 25	549410			865 D25								
Disp Gen 26	549420			865 D26								
Disp Gen 27	549430			865 D27								
Activity 875 - Compliance												
Shipman	506210	9,170	105,625	875 SST	55,501	11,793	1,573	4,845	21,401	10,786	6,017	8,094
Hill	506220	31,510	16,616	875 RST	8,789	36,811	9,407	6,663	9,733	9,733	10,019	16,091
Puna	506230	17,477	12,587	875 P01	8,109	2,967	8,660	15,271	9,082	11,213	10,497	14,646
Waimea	549250	7,605	51,873	875 BNS	5,726	1,187	152	8,488	4,723	6,336	5,258	6,166
Kaunohou	549260			875 ANS	1,257	2,085	643	2,250	1,591	4,624	4,044	13,872
Keahole	549280	7,034	6,614	875 CNS	15,735	6,791	24,846	40,488	17,946	16,383	14,237	28,686
CT2	549300	28,627	10,421									
Disp 24	549400	20,419	10,804	875 P03	5,214	3,181	6,360	2,231	12,988	16,805	16,129	14,489
Disp 25	549410			875 D24	906	253	58	1,900	159	2,312	1,837	1,927
Disp 26	549420			875 D25	703	158	6	2,928	278	2,312	1,837	1,927
Disp 27	549430			875 D26	494	158	6	1,877	278	2,312	1,837	1,927
		121,842	214,540	875 D27	103,440	65,590	51,739	96,415	78,815	96,200	77,929	109,752
Water Support (includes wastewater)												
Activity 866 - Apply/Obtain Permits												
Shipman	506210 50627			866 SST	2,950	20	425	2,643	470	6,576	6,012	6,174
Hill	506220 50627			866 RST	460	205	2,686	2,355	738	4,384	4,010	4,116
Puna	549250			866 P01	257	15	109	81				
Waimea	549260			866 BNS								
Keahole	549280 54917			866 CNS	1,483	135	2,311	289	130	1,066	1,004	1,029
Shipman	506210	69,313	42,970	876 SST	29,323	21,434	22,724	22,297	33,484	41,825	29,463	29,154
Hill	506220	74,483	73,632	876 RST	28,116	31,833	30,266	42,171	39,540	51,810	44,247	44,179
Puna	506230	24,173	31,080	876 P01	8,902	10,872	11,133	12,413	13,066	16,836	14,759	14,696
Waimea	549250	13,824	5,655	876 BNS	774	232	861	(209)		4,893	1,239	1,264
Kaunohou	549260			876 ANS	476	224	13	118	10			
Keahole	549280	2,489	7,125	876 CNS	748	666	247	275	315	37,097	29,804	29,695
CT2	549300	3,648	140									
Disp 24	549400	7,839	10,733	876 P03	7,722	7,259	12,138	3,154	53			
CT3	549430	195,779	171,335		81,202	72,915	82,902	85,586	87,807	164,517	130,538	130,307

Heco Environmental Support - Recorded 1987 to 2003, Forecast 2004 - 2005													
Source: FSI/RSR/ICB 1987-1988, Pillar 1989 - 2001, Esbase 2002-2003													
Support	Account	Activity	1987	1988	1989	2000	2001	2002	2003	2004	2005	2006	
						H0000043 1999 recd	H0000043 2000 recd	H0000043 2001 recd	H0000043 2002 recd	H0000043 2003 recd	H0000043 2004 estimate	H0000043 2005 estimate	H0000043 2006 estimate
Air Support													
Compliance Oil Permit													
Fuel Oil Testing	502220					11,388	12,067	11,493	12,258	14,566	15,814	14,514	14,804
Shipman	506210					3,916	11,670	4,147	3,748	10,651	9,476	4,528	4,609
Hill	506220					5,330	7,373	5,927	4,259	5,201	5,894	4,693	4,626
Puna	506230					398	6,108	2,359	2,635	1,235	2,820	4,988	5,283
Waimea	549250					804	62	487	10	122	3,320	1,071	1,088
Kaunohoua	549260					313	88	291	102				
Keahole	549280					824	936	1,362	596	259	7,093	6,585	6,732
CT3	549300						96				2,844		
						22,983	38,410	26,076	23,608	32,034	47,261	36,389	37,152
Compliance Non-oil Permit													
Shipman	506210					8,284	632	246	76	968	3,571	3,354	3,440
Hill	506220					14,202	4,460	4,360	12,158	11,394	11,570	10,708	10,946
Puna	506230					5,856	1,829	4,045	5,988	4,715	4,040	6,902	7,061
Waimea	549250					801	343	464	341	497	1,759	637	647
Kaunohoua	549260					189	34	296	270		438	402	412
Keahole	549280					4,808	672	910	1,209	731	2,541	2,559	2,612
CT3	549300					764	1,443	793			3,482		
						34,904	9,413	11,113	20,041	18,305	27,411	24,562	25,118
Compliance Noise													
Shipman	506230					91	68						
Hill	506230					91							
Puna	506230					91			7	19	6,335	1,837	965
Kaunohoua	549260					100	77						
Waimea	549250					91	77						
Keahole	549280					5,440		841	1,124	53	11,471	4,638	965
Disp 24													
Disp 25													
Disp 26													
Disp 27													
						5,905	222	841	1,131	72	17,806	6,475	1,930
Determ. Env Permit	506230					44							
Conduct Envir. Trng	500220						1,518	14,272	8,766				
- Hill - Wtr/Haz Mat										5,389	9,494	2,373	2,422
- Kea - Air										820	16,355	7,188	1,703
- Kea - Wtr/Haz Mat													
- Puna - Air										3,733	628	592	602
- Puna - Wtr/Haz Mat													
- Ship - Wtr/Haz Mat													
- Wma - Air										1,689	1,885	3,576	3,657
						44	1,518	14,272	12,721	11,631	28,362	13,729	8,384
Total						248,477	188,067	186,944	239,503	228,864	383,557	289,622	312,643
						248,476.94	188,067.22	186,944.03	239,502.65	228,864.00	383,557.00	289,622.00	312,643.00

CA-IR-65
DOCKET NO. 05-0315
ATTACHMENT 1
PAGE 8 OF 30

	FY 2005					FY 2006				
	PJA	PJB	PJC	PJW	Total	PJA	PJB	PJC	PJW	Total
241RST			\$ 14,514		\$ 14,514			\$ 14,804		\$ 14,804
788 CNS	\$ 5,517			\$ 1,671	\$ 7,188				\$ 1,703	\$ 1,703
788 PST				\$ 592	\$ 592				\$ 602	\$ 602
788 RST				\$ 2,373	\$ 2,373				\$ 2,422	\$ 2,422
788 SST				\$ 3,576	\$ 3,576				\$ 3,657	\$ 3,657
865 ANS	\$ 100				\$ 100					\$ -
865 RST	\$ 100				\$ 100					\$ -
865 SST	\$ 4,180				\$ 4,180					\$ -
866 CNS				\$ 1,004	\$ 1,004				\$ 1,029	\$ 1,029
866 RST				\$ 4,010	\$ 4,010				\$ 4,116	\$ 4,116
866 SST				\$ 6,012	\$ 6,012				\$ 6,174	\$ 6,174
875 ANS	\$ 4,044				\$ 4,044	\$ 13,872				\$ 13,872
875 BNS	\$ 5,258				\$ 5,258	\$ 6,166				\$ 6,166
875 CNS	\$ 783	\$ 13,454			\$ 14,237	\$ 326	\$ 28,360			\$ 28,686
875 D24	\$ 1,837				\$ 1,837		\$ 1,927			\$ 1,927
875 D25	\$ 1,837				\$ 1,837		\$ 1,927			\$ 1,927
875 D26	\$ 1,837				\$ 1,837		\$ 1,927			\$ 1,927
875 D27	\$ 1,837				\$ 1,837		\$ 1,927			\$ 1,927
875 P03	\$ 16,129				\$ 16,129		\$ 14,489			\$ 14,489
875 PST	\$ 154	\$ 10,343			\$ 10,497	\$ 156	\$ 14,490			\$ 14,646
875 RST	\$ 2,165	\$ 7,854			\$ 10,019	\$ 2,219	\$ 13,872			\$ 16,091
875 SST	\$ 6,017				\$ 6,017	\$ 8,094				\$ 8,094
876 BNS				\$ 1,239	\$ 1,239				\$ 1,264	\$ 1,264
876 CNS	\$ 664		\$ 8,708	\$ 20,432	\$ 29,804	\$ 673	\$ 8,882	\$ 20,140		\$ 29,695
876 PST	\$ 154		\$ 8,708	\$ 5,897	\$ 14,759	\$ 156	\$ 8,882	\$ 5,658		\$ 14,696
876 RST	\$ 467		\$ 26,125	\$ 17,655	\$ 44,247	\$ 477	\$ 26,648	\$ 17,054		\$ 44,179
876 SST	\$ 307		\$ 5,806	\$ 23,350	\$ 29,463	\$ 313	\$ 5,922	\$ 22,919		\$ 29,154
877 BNS				\$ 1,071	\$ 1,071			\$ 1,088		\$ 1,088
877 CNS				\$ 6,585	\$ 6,585			\$ 6,732		\$ 6,732
877 PST	\$ 2,404			\$ 2,594	\$ 4,998	\$ 2,633		\$ 2,660		\$ 5,293
877 RST	\$ 312		\$ 1,162	\$ 3,219	\$ 4,693	\$ 156	\$ 1,185	\$ 3,285		\$ 4,626
877 SST	\$ 192			\$ 4,336	\$ 4,528	\$ 192		\$ 4,417		\$ 4,609
878 ANS				\$ 402	\$ 402			\$ 412		\$ 412
878 BNS				\$ 637	\$ 637			\$ 647		\$ 647
878 CNS	\$ 153		\$ 968	\$ 1,438	\$ 2,559	\$ 155	\$ 987	\$ 1,470		\$ 2,612
878 P01				\$ 402	\$ 402			\$ 412		\$ 412
878 PST	\$ 2,608		\$ 2,903	\$ 989	\$ 6,500	\$ 2,674	\$ 2,961	\$ 1,014		\$ 6,649
878 RST	\$ 2,007		\$ 5,806	\$ 2,895	\$ 10,708	\$ 2,056	\$ 5,922	\$ 2,968		\$ 10,946
878 SST			\$ 1,162	\$ 2,192	\$ 3,354		\$ 1,185	\$ 2,255		\$ 3,440
879 CNS	\$ 4,638				\$ 4,638		\$ 965			\$ 965
879 PST	\$ 1,837				\$ 1,837		\$ 965			\$ 965
O&M	\$ 12,370	\$ 86,819	\$ 75,862	\$ 114,571	\$ 289,622	\$ 12,186	\$ 108,981	\$ 77,378	\$ 114,098	\$ 312,643
CAPITAL		\$ 221,635			\$ 221,635					\$ -
T&D			\$ 14,514	\$ 17,912	\$ 32,426				\$ 18,344	\$ 18,344
TOTAL	\$ 12,370	\$ 308,454	\$ 90,376	\$ 132,483	\$ 543,683	\$ 12,186	\$ 108,981	\$ 77,378	\$ 132,442	\$ 330,987

4/7/04: Per Kelly Whalen, use PJC 2005 Estimates for 2006 (escalate 2%).

Hirai, Sharon

From: Whalen, Kelly
Sent: Wednesday, April 07, 2004 12:25 PM
To: Hirai, Sharon
Subject: RE: ICB Estimates FY 2005 to 2006

Hi Sharon,
Sorry, forgot to respond to your earlier note. My notes in pink below.

-----Original Message-----

From: Hirai, Sharon
Sent: Wednesday, April 07, 2004 12:08 PM
To: Whalen, Kelly
Subject: RE: ICB Estimates FY 2005 to 2006

Hi Kelly,
Please let me know if I should use the same estimates for PJC from 2005 for 2006. (see attached)
[Whalen, Kelly] Yes that would be good.

Noticed that the forecast for 2005-2006, is lower than previous estimates for 2004-2005.
Previous forecast: FY 2004 (\$383,557) & FY 2005 (\$347,437)
This forecast: FY 2005 (\$289,622) [Whalen, Kelly] On the worksheets sent to HELCO \$453,307 & FY
2006 (\$235,265) [Whalen, Kelly] On the worksheets sent to HELCO \$253,609 *4/10/04 Her estimates include capital
and T&D expense.*

Also, noticed the estimates you provided includes capital dollars. Just want to be sure the capital portion
was provided to CT4 project manager (Tony Koyamatsu or Casey Cummins). Please advise. [Whalen,
Kelly] I didn't submit any BI estimates. Only BE. Is there another forecast you're looking at?

sharon

*4/10/04 TC to Kelly. project managers have
capital info.*

-----Original Message-----

From: Whalen, Kelly
Sent: Friday, April 02, 2004 4:08 PM
To: Hirai, Sharon
Subject: RE: ICB Estimates FY 2005 to 2006

Hi Sharon,
Let me check what happened with PJC.

-----Original Message-----

From: Hirai, Sharon
Sent: Friday, April 02, 2004 4:03 PM
To: Whalen, Kelly
Subject: RE: ICB Estimates FY 2005 to 2006

Hi Kelly,
Finally received the ICB in the mail today. Noticed that PJC forecast \$75,862 in 2005 for
Production, however nothing in 2006. Shall I use the same estimates for 2006 that is
shown in 2005? Also, noticed there were some capital charges for CT4 in 2005. Shall I
provide that information to the CT4 project manager or did you provide it to him already?
sharon

-----Original Message-----

4/7/2004

From: Whalen, Kelly
Sent: Monday, March 29, 2004 8:26 AM
To: Hirai, Sharon
Subject: RE: ICB Estimates FY 2005 to 2006

Hi Sharon,
I sent the ICB form and the associated detailed worksheets to Sherri's secretary last week. She said she has Sherri sign the ICBs and sent them off. Please let me know if you still do not have. Thank You.

-----Original Message-----

From: Hirai, Sharon
Sent: Thursday, March 25, 2004 1:27 PM
To: Loo, Sherri-Ann; Whalen, Kelly
Subject: FW: ICB Estimates FY 2005 to 2006

Can you please provide us with your 2005 to 2006 forecast. Thank you!
sharon

-----Original Message-----

From: Hirai, Sharon
Sent: Thursday, March 04, 2004 9:07 AM
To: Loo, Sherri-Ann; Whalen, Kelly
Cc: Giovanni, Dan
Subject: ICB Estimates FY 2005 to 2006

Please find attached Intercompany Service Form for years 2005 to 2006. We appreciate your prompt response in completing this form and providing your estimates to us by March 17, 2004, deadline per HELCO's budget schedule. Thank you!

Sharon Hirai

Hawaii Electric Light Co., Inc.

☎ (808) 969-0428

☎ (808) 969-0425 (fax)

✉ shirai@hei.com

4/7/2004

HAWAII ELECTRIC LIGHT COMPANY
PRODUCTION DEPARTMENT
Intercompany Charges - Environmental
Operating Forecast 2004 - 2005

Proj H043 Heco Env.xls
4/2003

Description	Naruc	RA	Act.	Loc.	Ind.	Proj	EE	2004	2005
								HECO Fcst Recd 4/03	HECO Fcst Recd 4/03
Operate/Mon Fuel Feed System									
- Hill	502220	HGA	241	RST	NE	H0000043	550	15,814	16,417
Conduct Envir Training									
- Hill - Air	500220	HGA	788	RST	NS	H0000043	550	8,047	8,308
- Hill - Wtr/Haz Mat	500220	HGA	788	RST	NS	H0000043	550	1,447	1,480
- Kea - Air	546280	HGA	788	CNS	NS	H0000043	550	15,447	0
- Kea - Wtr/Haz Mat	546280	HGA	788	CNS	NS	H0000043	550	908	925
- Puna - Air	500230	HGA	788	PST	NS	H0000043	550	0	1,777
- Puna - Wtr/Haz Mat	500230	HGA	788	PST	NS	H0000043	550	628	645
- SHP - Wtr/Haz Mat	500210	HGA	788	SST	NS	H0000043	550	1,885	1,935
- WMA - Air	546250	HGA	788	BNS	NS	H0000043	550		
Apply Obtain Air Permits									
- Shp	506210	HGA	865	SST	NE	H0000043	550	13271	0
- Hill		HGA	865	RST	NE	H0000043	550		
- Puna	506230	HGA	865	P01	NE	H0000043	550		
- Kanoelehua		HGA	865	ANS	NE	H0000043	550		
- CT3	549300	HGA	865	P03	NE	H0000043	550		
- Wma	549250	HGA	865	BNS	NE	H0000043	550	0	6413
- Keahole	549280	HGA	865	CNS	NE	H0000043	550	7,535	9,508
- Disp Gen 24		HGA	865	D24	NE	H0000043	550		
- Disp Gen 25		HGA	865	D25	NE	H0000043	550		
- Disp Gen 26		HGA	865	D26	NE	H0000043	550		
- Disp Gen 27		HGA	865	D27	NE	H0000043	550		
Apply/Obtain Water Permits									
- Shipman	506210	HGA	866	SST	NE	H0000043	550	6,576	6,826
- Hill	506220	HGA	866	RST	NE	H0000043	550	4,384	4,551
- Puna (PST)	506230	HGA	866	P01	NE	H0000043	550		
- Waimea	549250	HGA	866	BNS	NE	H0000043	550		
- Keahole	549280	HGA	866	CNS	NE	H0000043	550	1,096	1,138
Comply w/ Air Permits									
- Shipman	506210	HGA	875	SST	NE	H0000043	550	10,786	10,085
- Hill	506220	HGA	875	RST	NE	H0000043	550		2,475
- Puna (PST)	506230	HGA	875	P01	NE	H0000043	550	11,213	11,262
- Kanoelehua	549260	HGA	875	ANS	NE	H0000043	550	4,624	4,754
- Waimea	549250	HGA	875	BNS	NE	H0000043	550	6,335	8,308
- Keahole	549280	HGA	875	CNS	NE	H0000043	550	18,383	13,640
- Disp Gen 24	549400	HGA	875	D24	NE	H0000043	550	2,312	2,377
- Disp Gen 25	549410	HGA	875	D25	NE	H0000043	550	2,312	2,377
- Disp Gen 26	549420	HGA	875	D26	NE	H0000043	550	2,312	2,377
- Disp Gen 27	549430	HGA	875	D27	NE	H0000043	550	2,312	2,377
- CT3	549300	HGA	875	P03	NE	H0000043	550	16,805	16,595

HAWAII ELECTRIC LIGHT COMPANY
PRODUCTION DEPARTMENT
Intercompany Charges - Environmental
Operating Forecast 2004 - 2005

Proj H043 Heco Env.xls
4/2003

Description	Naruc	RA	Act.	Loc.	Ind.	Proj	EE	2004	2005
								HECO Fcst Recd 4/03	HECO Fcst Recd 4/03
Comply Wastewater Permit									
- Shipman	506210	HGA	876	SST	NE	H0000043	550	41,825	32,956
- Hill	506220	HGA	876	RST	NE	H0000043	550	51,810	53,608
- Puna (PST)	506230	HGA	876	P01	NE	H0000043	550	16,836	17,422
- Kanoelehua	549260	HGA	876	ANS	NE	H0000043	550	0	0
- Waimea	549250	HGA	876	BNS	NE	H0000043	550	4,893	1,373
- Keahole	549280	HGA	876	CNS	NE	H0000043	550	37,097	33,278
- CT3	549300	HGA	876	P03	NE	H0000043	550		
Comply Oil Permit									
- Shipman	506210	HGA	877	SST	NE	H0000043	550	9,476	4,743
- Hill	506220	HGA	877	RST	NE	H0000043	550	5,894	6,090
- Puna (PST)	506230	HGA	877	P01	NE	H0000043	550	2,820	2,920
- Kanoelehua	549260	HGA	877	ANS	NE	H0000043	550		
- Waimea	549250	HGA	877	BNS	NE	H0000043	550	3,320	1,153
- Keahole	549280	HGA	877	CNS	NE	H0000043	550	7,093	7,318
- CT3	549300	HGA	877	P03	NE	H0000043	550	2,844	
Comply w/ non oil permits									
- Shipman	506210	HGA	878	SST	NE	H0000043	550	3,571	3,699
- Hill	506220	HGA	878	RST	NE	H0000043	550	11,570	9,434
- Puna (PST)	506230	HGA	878	P01	NE	H0000043	550	4,040	4,186
- Kanoelehua	549260	HGA	878	ANS	NE	H0000043	550	438	455
- Waimea	549250	HGA	878	BNS	NE	H0000043	550	1,769	690
- Keahole	549280	HGA	878	CNS	NE	H0000043	550	2,541	2,629
- CT3	549300	HGA	878	P03	NE	H0000043	550	3,482	455
Comply Permit/Noise									
- Shipman	506210	HGA	879	SST	NE	H0000043	550	0	4,154
- Hill	506220	HGA	879	RST	NE	H0000043	550		1,777
- Puna (PST)	506230	HGA	879	P01	NE	H0000043	550	6,335	6,531
- Kanoelehua	549260	HGA	879	ANS	NE	H0000043	550		
- Waimea	549250	HGA	879	BNS	NE	H0000043	550	0	4,154
- Keahole	549280	HGA	879	CNS	NE	H0000043	550	11,471	11,862
- Disp Gen 24	549400	HGA	879	D24	NE	H0000043	550		
- Disp Gen 25	549410	HGA	879	D25	NE	H0000043	550		
- Disp Gen 26	549420	HGA	879	D26	NE	H0000043	550		
- Disp Gen 27	549430	HGA	879	D27	NE	H0000043	550		
TOTAL ENVIRONMENTAL								383,557	347,437

Source:HECO ICB forecast 4/02.

Heco Environmental Support - Recorded 1997 to 2003 (MarYTD)
Source: FSM/OSR CCB 1997-1998, Pillar 1989 - 2001, Estimate 2002-2003

Air Support	Account	1997	1998	ABM activity	H0000043		H0000043		H0000043		2004 Fcst 4/2003 estimate	2005 Fcst 4/2003 estimate
					1999 recd	2000 recd	2001 recd	2002 recd	2003 Annual			
Activity 865 - Apply/Obtain Permits												
Shipman	506210			865 SST	18						13,271	0
Hill	506220			865 RST				3,402	1,431			
Puna	506230			865 P01				561				6,413
Waimea	549250			865 BNS								
Kanoelehua	549260			865 ANS				1,119			7,535	9,508
Keahole	549280			865 CNS	1,088	85		2,513				
CT3	549300			865 P03								
Disp Gen 24	549400			865 D24								
Disp Gen 25	549410			865 D25								
Disp Gen 26	549420			865 D26								
Disp Gen 27	549430			865 D27								
Activity 875 - Compliance												
Shipman	506210	9,170	105,625	875 SST	55,501	11,793	1,573	4,845	5,299	10,786	10,786	10,085
Hill	506220	31,510	16,616	875 RST	8,789	36,811	9,407	6,663	5,299	0	0	2,475
Puna	506230	17,477	12,587	875 P01	8,109	2,967	8,660	15,271	3,736	11,213	11,213	11,262
Waimea	549250	7,605	51,873	875 BNS	5,726	1,187	152	8,498		6,335	6,335	8,308
Kanoelehua	549260			875 ANS	1,257	2,085	643	2,250	4,605	4,624	4,624	4,754
Keahole	549280			875 CNS	15,735	6,791	24,846	40,488	18,547	18,383	18,383	13,640
CT2	549290	28,627	6,614	875 D24								
CT3	549300	20,419	10,804	875 P03	5,214	3,181	6,380	2,231	17,328	16,805	16,805	16,595
Disp 24	549400			875 D24	806	253	58	1,900		2,312	2,312	2,377
Disp 25	549410			875 D25	703	158	6	2,928		2,312	2,312	2,377
Disp 26	549420			875 D26	494	158	6	1,877		2,312	2,312	2,377
Disp 27	549430			875 D27		123	6	1,870		2,312	2,312	2,377
					103,440	65,590	51,739	96,415	50,946	98,200	98,200	92,548
Water Support (includes wastewater)												
Activity 866 - Apply/Obtain Permits												
Shipman	506210			866 SST	2,950	20	425	2,643		6,576	6,576	6,826
Hill	506220			866 RST	450	205	2,686	2,355	1,608	4,384	4,384	4,551
Puna	506230			866 P01	257	15	109	81				
Waimea	549250			866 BNS								
Keahole	549280			866 CNS	1,483	135	2,311	289		1,096	1,096	1,138
Activity 876 - Compliance												
Shipman	506210	69,313	42,970	876 SST	29,323	21,434	22,724	22,297	25,062	41,825	41,825	32,966
Hill	506220	74,493	73,632	876 RST	28,116	31,833	30,256	42,171	45,600	51,810	51,810	53,608
Puna	506230	24,173	31,080	876 P01	8,902	10,872	11,133	12,413	16,077	16,836	16,836	17,422
Waimea	549250	13,824	5,655	876 BNS	774	232	861	(209)		4,893	4,893	1,373
Kanoelehua	549260			876 ANS	476	224	13	118				
Keahole	549280	2,489	7,125	876 CNS	748	686	247	275	40	37,087	37,087	33,278
CT2	549290	3,648	140	876 D25								
CT3	549300	7,839	10,733	876 P03	7,722	7,259	12,138	3,154				
					81,202	72,915	82,902	85,586	88,387	164,517	164,517	151,152

Compliance Oil Permit										
Fuel Oil Testing	502220	241 RST	11,398	12,067	11,493	12,258	10,460	15,814	16,417	
Shipman	506210	877 SST	3,916	11,670	4,147	3,748	8,354	9,476	4,743	
Hill	506220	877 RST	5,330	7,373	5,927	4,259	1,986	5,894	6,090	
Puna	506230	877 P01	398	6,108	2,359	2,635	1,644	2,820	2,920	
Waimea	549250	877 BNS	804	62	497	10		3,320	1,153	
Kanoelehua	549280	877 ANS	313	98	291	102				
Keahole	549280	877 CNS	824	936	1,362	596	184	7,093	7,318	
CT3	549300	877 P03	96	96				2,844	0	
			22,983	38,410	26,076	23,608	22,629	47,261	38,641	
Compliance Non-oil Permit										
Shipman	506210	878 SST	8,284	632	246	76	1,279	3,571	3,699	
Hill	506220	878 RST	14,202	4,460	4,360	12,158	13,239	11,570	9,434	
Puna	506230	878 P01	5,856	1,829	4,045	5,986	7,497	4,040	4,186	
Waimea	549250	878 BNS	801	343	464	341	1,049	1,769	690	
Kanoelehua	549260	878 ANS	189	34	296	270		438	455	
Keahole	549280	878 CNS	4,808	672	910	1,209	1,817	2,541	2,628	
CT3	549300	878 P03	764	1,443	793			3,482	455	
			34,904	9,413	11,113	20,041	24,881	27,411	21,548	
Compliance Noise										
Shipman	506230	879 SST	91	68				0	4,154	
Hill	506230	879 RST	91					0	1,777	
Puna	506230	879 P01	91			7		6,335	6,531	
Kanoelehua	549260	879 ANS	100	77						
Waimea	549250	879 BNS	91	77				0	4,154	
Keahole	549280	879 CNS	5,440		841	1,124		11,471	11,862	
Disp 24										
Disp 25										
Disp 26										
Disp 27										
			5,905	222	841	1,131	-	17,806	28,478	
Determ. Env Permit										
	506230	860 P01	44							
Conduct Envir. Trnç										
- Hill - Wtr/Haz Mat	500220	788 HPO		1,518	14,272	8,756		5,561	9,494	9,788
- Kea - Air		788 RST				2,250		3,280	16,355	925
- Kea - Wtr/Haz Mat		788 CNS								
- Puna - Air		788 PST							628	2,422
- Puna - Wtr/Haz Mat		788 SST				1,715			1,885	1,935
- Shp - Wtr/Haz Mat										
- Wma - Air										
			44	1,518	14,272	12,721	8,841	28,362	15,070	
Total			248,477	188,067	186,944	239,503	195,684	383,557	347,437	
			248,476.94	188,067.22	186,944.03	239,502.85	195,684.04			

INTERCOMPANY SERVICE FORM

(Check one)

Recurring Non-Recurring

Period of Service Requested:

2 years (non-project/non-program) 2 years (project/program-O&M)

Date of Request: March 28, 2003

Date Estimate is Needed: April 11, 2003

Receiver Information:

Contact Person's Name:	Sharon Hirai, Fiscal Administrator Production Dept.
Contact Person's Phone Number:	(808) 969-0428
Subsidiary (or Other HEI Affiliate) Company Name:	HELCO
Department/Division:	Production Department
Codeblock (including project#):	Various, HELCO project H0000043
Contact Person's RA:	HAA
Approved By: <i>[Signature]</i>	Dan Giovanni, Manager, HELCO Production Dept

SCOPE OF SERVICE OR WORK (See Instructions):

HECO will provide environmental services, including but not limited to Air, Water, Wastewater, Noise Compliance, etc, for all HELCO plant locations.

Please see attached spreadsheet for details.

MAJOR PROCESS THAT THIS SERVICE SUPPORTS:

Manage Environmental Permitting & Compliance

Provider Information:

Contact Person's Name:	Sherrri-Ann Loo, Manager Environmental Department
	Victoria Marzano
Contact Person's Phone Number:	(808) 543-4500
Company Name:	HECO
Department/Division:	Environmental Department/Administrative
Contact Person's RA:	PJA
Approved By: <i>[Signature]</i>	4/11/03

ESTIMATES (To Be Provided By PROVIDER)(See Instructions - Please attach details):

	TOTAL YEAR 2004	TOTAL YEAR 2005	TOTAL YEAR 2006	TOTAL YEAR 2007	TOTAL YEAR 2008
Total Estimated Costs (labor, non-labor, and on-cost)	\$383,557	\$347,437			

	A	C	H	R	S	T
1	HELCO POWER SUPPLY					
2	HECO ENVIRONMENTAL INTERCOMPANY ESTIMATES FOR 2004 - 2005					
3						
4	C:\Winnt\Profiles\shiral\Local Settings\Temporary Internet Files\OLK7\ICB HELCO JA-JB-JC-JW 2004-2005 Bud. Est. 4-4-03.xls.xls]Power Supply Total					
5						
6	PLANT	ACT	DESCRIPTION	2004 HECO ESTIMATES	2005 HECO ESTIMATES	RA
7						
8						
9	Hill-RST	788	HE Conduct Environ Training - ABM A/C 788 - Air	\$8,047	\$8,308	JB
10		788	HE Conduct Environ Training - ABM A/C 788 - Wtr/HazMat	\$1,447	\$1,480	JW
11		241	HE Lab Analyses to Oper & Monit Fuel Feed System	\$15,814	\$16,417	JC
12		875	HE Air Compliance			
13		875	CAA Audit (JA); Air Audit @ RST '05	\$0	\$2,475	JA
14		701	Forecasting-linked to 875 service order			
15		735	Lobbying-linked to 875 service order			
16		876	HE WW Comp/Lab/Water Mon/ZOM/WETT/Audits			
17		JC		\$33,389	\$34,671	JC
18		JW		\$18,421	\$18,937	JW
19		877	HE Oil Comp/SPCC/OPA/AUDITS			
20		JC		\$2,449	\$2,545	JC
21		JW		\$3,445	\$3,545	JW
22		878	HE Haz Waste Compliance (Non-oil)			
23		JA		\$2,475	\$0	JA
24		JC		\$5,946	\$6,172	JC
25		JW		\$3,149	\$3,262	JW
26		879	HE Noise Compliance	\$0	\$1,777	JB
27		865	HE Apply for Air Permits			
28		866	HE Apply for Water Permits	\$4,384	\$4,551	JW
29	Hill-RST			\$98,966	\$104,140	
30						
31						
32	Kanoelehua-ANS	875	HE Air Compliance	\$4,624	\$4,754	JB
33		876	HE WW Comp/Lab/Water Mon/ZOM/WETT/Audits			
34		877	HE Oil Comp/SPCC/OPA/AUDITS			
35		878	HE Haz Waste Compliance (Non-oil)	\$438	\$455	JW
36		879	HE Noise Compliance			
37		865	HE Apply for Air Permits			
38		866	HE Apply for Water Permits			
39	Kanoelehua-ANS			\$5,062	\$5,209	
40						
41						
42	Keahole-CNS	788	HE Conduct Environ Training - ABM A/C 788 - Air	\$15,447	\$0	JB
43		788	HE Conduct Environ Training - ABM A/C 788 - Wtr/HazMat	908	925	JW
44		875	HE Air Compliance	\$13,525	\$13,640	JB
45		875	HE Air/Audits (JA)	\$4,858	\$0	JA
46		876	HE WW Comp/Lab/Water Mon/ZOM/WETT/Audits (JA)	\$4,858	\$0	JA
47		JC		\$10,681	\$11,090	JC
48		JW		\$21,558	\$22,188	JW
49		877	HE Oil Comp/SPCC/OPA/AUDITS			
50		JC				
51		JW		\$7,093	\$7,318	JW
52		878	HE Haz Waste Compliance (Non-oil)			
53		JC		\$991	\$1,029	JC
54		JW		\$1,550	\$1,600	JW
55		879	HE Noise Compliance	\$11,471	\$11,862	JB
56		865	HE Apply for Air Permits	\$7,535	\$9,508	JB
57		866	HE Apply for Water Permits JW	\$1,096	\$1,138	JW
58	Keahole-CNS			\$101,571	\$80,298	

CA-IR-65
DOCKET NO. 05-0315
ATTACHMENT 1
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	A	C	H	R	S	T
4	C:\Winn\Profiles\shiral\Local Settings\Temporary Internet Files\OLK7\ICB HELCO JA-JB-JC-JW 2004-2005 Bud. Est. 4-4-03.xls\Power Supply Total					
5						
6	PLANT	ACT DESCRIPTION		2004 HECO ESTIMATES	2005 HECO ESTIMATES	RA
59						
60						
61						
62	Puna Steam-PST	788 HE Conduct Environ Training - ABM A/C 788 - Air			\$1,777	JB
63		788 HE Conduct Environ Training - ABM A/C 788 - Wtr/HazMat		\$628	\$645	JW
64		875 HE Air Compliance		\$11,213	\$11,262	JB
65		876 HE WW Comp/Lab/Water Mon/ZOM/WETT/Audits				
66		JC		\$10,694	\$11,104	JC
67		JW		\$6,142	\$6,318	JW
68		877 HE Oil Comp/SPCC/OPA/AUDITS				
69		JC				
70		JW		\$2,820	\$2,920	JW
71		878 HE Haz Waste Compliance (Non-oil)				
72		JC		\$2,973	\$3,086	JC
73		JW		\$1,067	\$1,100	JW
74		879 HE Noise Compliance		\$6,335	\$6,531	JB
75		865 HE Apply for Air Permits				
76		866 HE Apply for Water Permits				
77	Puna Steam-PST			\$41,872	\$44,743	
78						
79	Puna CT3-P03-PNS	875 HE Air Compliance		\$16,805	\$16,595	JB
80		876 HE WW Comp/Lab/Water Mon/ZOM/WETT/Audits		\$0	\$0	JC
81		JC				
82		JW				
83		877 HE Oil Comp/SPCC/OPA/AUDITS				
84		JA		\$2,844		JA
85		JC				
86		JW				
87		878 HE Haz Waste Compliance (Non-oil)				
88		JA		\$3,044		JA
89		JC				
90		JW		\$438	\$455	JW
91		879 HE Noise Compliance				
92		865 HE Apply for Air Permits				
93		866 HE Apply for Water Permits				
94	Puna CT3-P03-PNS			\$23,131	\$17,050	
95						
96						
97	Shipman-SST	788 HE Conduct Environ Training - ABM A/C 788 - Air				
98		788 HE Conduct Environ Training - ABM A/C 788 - Wtr/HazMat		\$1,885	\$1,935	JW
99		875 HE Air Compliance		\$10,786	\$10,085	JB
100		876 HE WW Comp/Lab/Water Mon/ZOM/WETT/Audits				
101		JC		\$17,124	\$7,481	JC
102		JW		\$24,701	\$25,475	JW
103		877 HE Oil Comp/SPCC/OPA/AUDITS (FSRP Audits) JA		\$4,858	\$0	JA
104		JC				
105		JW		\$4,618	\$4,743	JW
106		878 HE Haz Waste Compliance (Non-oil)				
107		JC		\$1,189	\$1,234	JC
108		JW		\$2,382	\$2,465	JW
109		879 HE Noise Compliance		\$0	\$4,154	JB
110		865 HE Apply for Air Permits		\$13,271	\$0	JB
111		866 HE Apply for Water Permits		\$6,576	\$6,826	JW
112	Shipman-SST			\$87,390	\$64,398	

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DOCKET NO. 05-0315
ATTACHMENT 1
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	A	C	H	R	S	T
4	C:\Winnt\Profiles\shirai\Local Settings\Temporary Internet Files\OLK7\ICB HELCO JA-JB-JC-JW 2004-2005 Bud. Est. 4-4-03.xls]Power Supply Total					
5						
6	PLANT	ACT	DESCRIPTION	2004 HECO ESTIMATES	2005 HECO ESTIMATES	RA
113						
114	Waimea-BNS	788	HE Conduct Environ Training - ABM A/C 788 - Air			
115		788	HE Conduct Environ Training - ABM A/C 788 - Wtr/HazMat			
116		875	HE Air Compliance	\$6,335	\$8,308	JB
117		876	HE WW Comp/Lab/Water Mon/ZOM/WETT/Audits (JA)	\$3,562	\$0	JA
118		876	HE Compliance Water JW G521	\$1,331	\$1,373	JW
119		877	HE SPCC/AUDITS (JA)	\$2,192	\$0	JA
120		877	HE Compliance Oil JW G523	\$1,128	\$1,153	JW
121		878	HE Haz Waste Compliance (Non-oil) JW G526	\$673	\$680	JW
122		878	HE RCRA Audits (JA)	\$1,096	\$0	JA
123		879	HE Noise Compliance	\$0	\$4,154	JB
124		865	HE Apply for Air Permits	\$0	\$6,413	JB
125		866	HE Apply for Water Permits			
126				\$16,317	\$22,091	
127						
128						
129	Panaewa D24	865	HE Apply for Air Permits			
130		875	HE Air Compliance	\$2,312	\$2,377	JB
131		879	HE Noise Compliance			
132				\$2,312	\$2,377	
133						
134						
135	Ouli D25	865	HE Apply for Air Permits			
136		875	HE Air Compliance	\$2,312	\$2,377	JB
137		879	HE Noise Compliance			
138				\$2,312	\$2,377	
139						
140						
141	Punaluu D26	865	HE Apply for Air Permits			
142		875	HE Air Compliance	\$2,312	\$2,377	JB
143		879	HE Noise Compliance			
144				\$2,312	\$2,377	
145						
146	Kapua D27	865	HE Apply for Air Permits			
147		875	HE Air Compliance	\$2,312	\$2,377	JB
148		879	HE Noise Compliance			
149				\$2,312	\$2,377	
150						
151						
152				\$383,557	\$347,437	

HAWAII ELECTRIC LIGHT COMPANY
PRODUCTION DEPARTMENT
Intercompany Charges - Environmental
Operating Forecast 2003 - 2004

Proj H043 Heco Env.xls
3/2002

Description	Naruc	RA	Act.	Loc.	Ind.	Proj	EE	2003	2004	
								HECO Fcst Recd 3/02	HECO Fcst Recd 3/02	
Operate/Mon Fuel Feed System										
- Hill	502220	HGA	241	RST	NE	H0000043	550	13,102	13,417	
Conduct Envir Training										
- Hill - Air	500220	HGA	788	RST	NS	H0000043	550	0	0	
- Hill - Wtr/Haz Mat	500220	HGA	788	RST	NS	H0000043	550	5,500	5,632	
- Kea - Air	546280	HGA	788	CNS	NS	H0000043	550	0	0	
- Kea - Wtr/Haz Mat	546280	HGA	788	CNS	NS	H0000043	550	4,500	4,608	
- Puna - Air	500230	HGA	788	PST	NS	H0000043	550	0	0	
- Puna - Wtr/Haz Mat	500230	HGA	788	PST	NS	H0000043	550	4,500	4,608	
- SHP - Wtr/Haz Mat	500210	HGA	788	SST	NS	H0000043	550	4,500	4,608	
- WMA - Air	546250	HGA	788	BNS	NS	H0000043	550	2,000	2,048	
Apply Obtain Air Permits										
- Shp	506210	HGA	865	SST	NE	H0000043	550	0	20,000	air permit renewal
- Hill	506220	HGA	865	RST	NE	H0000043	550	10,000	0	new
- Puna	506230	HGA	865	P01	NE	H0000043	550	0	0	permit renewal
- Kanoelehua	549260	HGA	865	ANS	NE	H0000043	550	10,000	0	air permit renewal new
- CT3	549300	HGA	865	P03	NE	H0000043	550	0	0	
- Wma	549250	HGA	865	BNS	NE	H0000043	550	0	0	
- Keahole	549280	HGA	865	CNS	NE	H0000043	550	0	0	
- Disp Gen 24	549400	HGA	865	D24	NE	H0000043	550	100	102	new
- Disp Gen 25	549410	HGA	865	D25	NE	H0000043	550	100	102	new
- Disp Gen 26	549420	HGA	865	D26	NE	H0000043	550	100	102	new
- Disp Gen 27	549430	HGA	865	D27	NE	H0000043	550	100	102	new
Apply/Obtain Water Permits										
- Shipman	506210	HGA	866	SST	NE	H0000043	550	445	456	
- Hill	506220	HGA	866	RST	NE	H0000043	550	998	1,022	
- Puna (PST)	506230	HGA	866	P01	NE	H0000043	550	129	132	
- Waimea	549250	HGA	866	BNS	NE	H0000043	550	227	233	
- Keahole	549280	HGA	866	CNS	NE	H0000043	550	2,422	2,480	
Comply w/ Air Permits										
- Shipman	506210	HGA	875	SST	NE	H0000043	550	1,649	1,688	
- Hill	506220	HGA	875	RST	NE	H0000043	550	10,047	10,287	
- Puna (PST)	506230	HGA	875	P01	NE	H0000043	550	10,000	17,920	
- Kanoelehua	549260	HGA	875	ANS	NE	H0000043	550	583	597	
- Waimea	549250	HGA	875	BNS	NE	H0000043	550	5,000	5,120	
- Keahole	549280	HGA	875	CNS	NE	H0000043	550	32,500	30,780	
- Disp Gen 24	549400	HGA	875	D24	NE	H0000043	550	109	112	
- Disp Gen 25	549410	HGA	875	D25	NE	H0000043	550	100	102	
- Disp Gen 26	549420	HGA	875	D26	NE	H0000043	550	100	102	
- Disp Gen 27	549430	HGA	875	D27	NE	H0000043	550	100	102	
- CT3	549300	HGA	875	P03	NE	H0000043	550	5,000	15,360	

HAWAII ELECTRIC LIGHT COMPANY
PRODUCTION DEPARTMENT
Intercompany Charges - Environmental
Operating Forecast 2003 - 2004

Proj H043 Heco Env.xls
3/2002

Description	Naruc	RA	Act.	Loc.	Ind.	Proj	EE	2003	2004
								HECO Fcst Recd 3/02	HECO Fcst Recd 3/02
Comply Wastewater Permit									
- Shipman	506210	HGA	876	SST	NE	H0000043	550	23,943	27,077
- Hill	506220	HGA	876	RST	NE	H0000043	550	35,879	36,740
- Puna (PST)	506230	HGA	876	P01	NE	H0000043	550	14,417	12,263
- Kanoelehua	549260	HGA	876	ANS	NE	H0000043	550	100	102
- Waimea	549250	HGA	876	BNS	NE	H0000043	550	675	691
- Keahole	549280	HGA	876	CNS	NE	H0000043	550	8,500 18,500	18,944
- CT3	549300	HGA	876	P03	NE	H0000043	550	3,000	3,072
Comply Oil Permit									
- Shipman	506210	HGA	877	SST	NE	H0000043	550	2,963	5,594
- Hill	506220	HGA	877	RST	NE	H0000043	550	8,706	6,415
- Puna (PST)	506230	HGA	877	P01	NE	H0000043	550	2,502	2,562
- Kanoelehua	549260	HGA	877	ANS	NE	H0000043	550	305	312
- Waimea	549250	HGA	877	BNS	NE	H0000043	550	261	267
- Keahole	549280	HGA	877	CNS	NE	H0000043	550	1,427	1,462
- CT3	549300	HGA	877	P03	NE	H0000043	550	0	0
Comply w/ non oil permits									
- Shipman	506210	HGA	878	SST	NE	H0000043	550	1,965	4,572
- Hill	506220	HGA	878	RST	NE	H0000043	550	5,522	5,654
- Puna (PST)	506230	HGA	878	P01	NE	H0000043	550	4,926 -9,526	7,315
- Kanoelehua	549260	HGA	878	ANS	NE	H0000043	550	387	396
- Waimea	549250	HGA	878	BNS	NE	H0000043	550	486	498
- Keahole	549280	HGA	878	CNS	NE	H0000043	550	3,660	3,748
- CT3	549300	HGA	878	P03	NE	H0000043	550	2,931	3,001
Comply Permit/Noise									
- Shipman	506210	HGA	879	SST	NE	H0000043	550	0	0
- Hill	506220	HGA	879	RST	NE	H0000043	550	0	0
- Puna (PST)	506230	HGA	879	P01	NE	H0000043	550	2,500	2,560
- Kanoelehua	549260	HGA	879	ANS	NE	H0000043	550	0	0
- Waimea	549250	HGA	879	BNS	NE	H0000043	550	0	0
- Keahole	549280	HGA	879	CNS	NE	H0000043	550	5,000 15,000	15,360
- Disp Gen 24	549400	HGA	879	D24	NE	H0000043	550	0	0
- Disp Gen 25	549410	HGA	879	D25	NE	H0000043	550	0	0
- Disp Gen 26	549420	HGA	879	D26	NE	H0000043	550	0	0
- Disp Gen 27	549430	HGA	879	D27	NE	H0000043	550	0	0
TOTAL ENVIRONMENTAL								293,566	300,427

243,566

Source:HECO ICB forecast 3/02, revised 3/27/02.

Budget cuts 18%

Heco Environmental Support - Recorded 1997 to 2001
Source: FSM/905R ICB 1997-1998, Pillar 1999 - 2001

Air Support	Account	1997	1998	ABM activity	H0000043	H0000043	H0000043
					1999 recd	2000 recd	2001 recd
Shipman	506210	9,170	105,625	865 SST	18	-	-
				875 SST	55,501	11,793	1,573
Hill	506220	31,510	16,616	875 RST	8,789	36,811	9,407
Puna	506230	17,477	12,587	875 P01	8,109	2,967	8,660
Waimea	549250	7,605	51,873	875 BNS	5,726	1,187	152
Kanoelehua	549260			875 ANS	1,257	2,085	643
Keahole	549280	7,034	6,614	865 CNS	1,088	85	
				875 CNS	15,735	6,791	24,846
CT2	549290	28,627	10,421				
CT3	549300	20,419	10,804	875 P03	5,214	3,181	6,380
Disp 24	549400			875 D24	806	253	58
Disp 25	549410			875 D25	703	158	6
Disp 26	549420			875 D26	494	158	6
Disp 27	549430					123	6
		121,842	214,540		103,440	65,590	51,739
Water Support (includes wastewater)							
Shipman	506210	69,313	42,970	866 SST	2,950	20	425
				876 SST	29,323	21,434	22,724
Hill	506220	74,493	73,632	866 RST	450	205	2,686
				876 RST	28,116	31,833	30,256
Puna	506230	24,173	31,080	866 P01	257	15	109
				876 P01	8,902	10,872	11,133
Waimea	549250	13,824	5,655	876 BNS	774	232	861
Kanoelehua	549260			876 ANS	476	224	13
Keahole	549280	2,489	7,125	866 CNS	1,483	135	2,311
				876 CNS	748	686	247
CT2	549290	3,648	140				
CT3	549300	7,839	10,733	876 P03	7,722	7,259	12,138
		195,779	171,335		81,202	72,915	82,902
Compliance Oil Permit							
Kanoelehua	549260			877 ANS	313	98	291
Waimea	549250			877 BNS	804	62	497
Keahole	549280			877 CNS	824	936	1,362
Puna	506230			877 P01	398	6,108	2,359
CT3	549300			877 P03		96	-
Hill	506220			877 RST	5,330	7,373	5,927
Shipman	506210			877 SST	3,916	11,670	4,147
Fuel Oil Testing	502220			241 RST	11,398	12,067	11,493
					22,983	38,410	26,076
Compliance Non-oil Permit							
Kanoelehua	549260			878 ANS	189	34	296
Waimea	549250			878 BNS	801	343	464
Keahole	549280			878 CNS	4,808	672	910
Puna	506230			878 P01	5,856	1,829	4,045
CT3	549300			878 P03	764	1,443	793
Hill	506220			878 RST	14,202	4,460	4,360
Shipman	506210			878 SST	8,284	632	245
					34,904	9,413	11,113
Compliance Noise							
Kanoelehua	549260			879 ANS	100	77	
Waimea	549250			879 BNS	91	77	
Keahole	549280			879 CNS	5,440		841
Puna	506230			879 P01	91		
Hill	506230			879 RST	91		
Shipman	506230			879 SST	91	68	
					5,905	222	841
Determ. Env Permit							
Conduct Envir. Trng	500220			860 P01	44		
				788 HPO		1,518	14,272
					44	1,518	14,272
Total		317,621	385,875		248,477	188,067	186,944
					248,476.94	188,067.22	186,944.03

» budget manager: ABM_Process Trend

Act	Activity	Loc	GL INT NARUC	FY99	FY00	FY01
				Actual	Actual	Actual2002
241	Operate & Monitor Fuel Feed System	RST	502220	\$11,398.43	\$12,067.43	\$11,493.40
				\$11,398.43	\$12,067.43	\$11,493.40
788	Conduct Employee Training	BNS	546250	0	0	0
		CNS	549280	0	0	0
		HPO	500220	0	\$1,518.09	\$14,272.38
		PST	500230	0	0	0
		RST	500220	0	0	0
		SST	500210	0	0	0
				0	\$1,518.09	\$14,272.38
880	Determine Environmental Permits/Ability	P01	506230	\$43.65	0	0
				\$43.65	0	0
865	Apply for & Obt Envr Permits-Air	BNS	549250	0	0	0
		CNS	549280	\$1,087.86	\$84.87	0
		P01	506230	0	0	0
		P03	549300	0	0	0
		SST	506210	\$18.35	0	0
				\$1,106.21	\$84.87	0
866	Apply for & Obt Envr Permits-Water	BNS	549250	0	0	0
		CNS	549280	\$1,483.18	\$134.81	\$2,310.89
		P01	506230	\$257.31	\$15.33	\$108.75
		RST	506220	\$449.09	\$204.89	\$2,685.64
		SST	506210	\$2,950.20	\$19.81	\$425.12
				\$5,140.68	\$374.64	\$5,530.40
875	Comply Ongoing Permits/Reg Reqs-Air	ANS	549260	\$1,258.97	\$2,085.15	\$643.49
		BNS	549250	\$5,739.98	\$1,188.58	\$102.29
		CNS	549280	\$15,735.25	\$6,791.13	\$24,845.75
		D24	549400	\$805.51	\$252.66	\$57.81
		D25	549410	\$703.20	\$157.72	\$8.43
		D26	549420	\$493.71	\$157.72	\$6.43
		D27	549430	0	\$123.08	\$6.43
		P01	506230	\$8,109.16	\$2,966.67	\$8,860.05
		P03	549300	\$5,214.14	\$3,180.74	\$6,380.29
		RST	506220	\$8,788.66	\$36,810.71	\$9,407.37
		SST	506210	\$55,501.17	\$11,792.57	\$1,572.98
				\$102,333.65	\$85,504.93	\$51,739.12
876	Comply Ongoing-Wastewater	ANS	549260	\$478.18	\$224.44	\$12.83
		BNS	549250	\$773.68	\$231.69	\$650.87
		CNS	549280	\$747.99	\$688.28	\$248.69
		P01	506230	\$8,901.96	\$10,871.60	\$11,132.75
		P03	549300	\$7,722.22	\$7,259.26	\$12,138.29
		RST	506220	\$28,116.98	\$31,833.34	\$30,256.16
		SST	506210	\$29,322.54	\$21,433.64	\$22,724.45
				\$78,060.85	\$72,540.25	\$77,372.04
877	Comply Ongoing-Solid & Haz Waste, Oil Rel	ANS	549260	\$312.91	\$97.58	\$291.16
		BNS	549250	\$604.49	\$61.87	\$496.67
		CNS	549280	\$824.13	\$938.03	\$1,362.07
		P01	506230	\$387.54	\$6,107.77	\$2,358.60
		P03	549300	0	\$96.38	0
		RST	506220	\$5,329.73	\$7,372.72	\$5,827.36
		SST	506210	\$3,915.82	\$11,669.87	\$4,146.91
				\$11,584.62	\$26,342.22	\$14,582.77
878	Comply Ongoing-Solid & Haz Waste, NonOil	ANS	549260	\$189.37	\$33.84	\$295.74
		BNS	549250	\$800.51	\$342.72	\$483.82
		CNS	549280	\$4,808.10	\$672.28	\$909.55
		P01	506230	\$5,855.82	\$1,829.49	\$4,045.26
		P03	549300	\$784.30	\$1,443.12	\$792.94
		RST	506220	\$14,201.54	\$4,459.59	\$4,359.90
		SST	506210	\$5,283.91	\$631.95	\$245.63
				\$34,903.55	\$9,413.00	\$11,112.64
879	Apply for, Obtain, Comply Ongoing-Noise	ANS	549260	\$100.03	\$78.78	0
		BNS	549250	\$91.46	\$78.78	0
		CNS	549280	\$5,439.55	0	\$841.28
		D24	549400	0	0	0
		D25	549410	0	0	0
		D26	549420	0	0	0
		D27	549430	0	0	0
		P01	506230	\$91.46	0	0
		RST	506220	\$91.46	0	0
		SST	506210	\$91.46	\$68.03	0
				\$5,905.42	\$221.69	\$841.28
				\$248,476.94	\$188,067.22	\$188,944.03

Sharon Hiral
 10B (1)

INTERCOMPANY SERVICE FORM

(Check one)
 Recurring Non-Recurring

Period of Service Requested:
 2 years (non-project/non-program) 2 years (project/program-O&M)

Date of Request: March 1, 2002
 Date Estimate is Needed: March 22, 2002

Receiver Information:

Contact Person's Name:	Sharon Hiral, Fiscal Administrator, Production Dept.
Contact Person's Phone Number:	(808) 969-0428
Subsidiary (or Other HEI Affiliate) Company Name:	HELCO
Department/Division:	Production Department
Codeblock (including project#):	Various, HELCO project H0000043
Contact Person's RA:	HAA
Approved By: <i>[Signature]</i> 2/1/02	Dan Giovanni, Manager, HELCO Production Dept

SCOPE OF SERVICE OR WORK (See Instructions):
 HECO will provide environmental services, including but not limited to Air, Water, Wastewater, Noise Compliance, etc, for all HELCO plant locations.

MAJOR PROCESS THAT THIS SERVICE SUPPORTS:
 Manage Environmental Permitting & Compliance

Provider Information:

Contact Person's Name:	Scott Seu, Manager Environmental Department
Contact Person's Phone Number:	(808) 543-4500
Company Name:	HECO
Department/Division:	Environmental Department/Administrative
Contact Person's RA:	PJA
Approved By: <i>[Signature]</i>	

ESTIMATES (To Be Provided By PROVIDER)(See Instructions - Please attach details):

	TOTAL YEAR 2003	TOTAL YEAR 2004	TOTAL YEAR 2005	TOTAL YEAR 2006	TOTAL YEAR 2007
Total Estimated Costs (labor, non-labor, and on-cost)	\$293,346	\$307,560			
<i>Revised 2/27/02</i>	<i>\$293,566</i>	<i>\$300,427</i>			

A	C	H	I	J	K	L	M	N	O	
1	HELCO POWER SUPPLY									
2	HECO ENVIRONMENTAL INTERCOMPANY ESTIMATES FOR 2003 - 2004									
3										
4										
5										
6	PLANT	ACT	DESCRIPTION	1999 ACTUALS	2000 ACTUALS	2001 ACTUALS	2001 JCI/JW Actuals	2002 Auth Training	(2001 x 1.048) 2003 HECO ESTIMATES	(2003 x 1.024) 2004 HECO ESTIMATES
7										
8	Hill-RST	788	HE Conduct Environ Training - ABM A/C 788 - Air					\$0		
9		788	HE Conduct Environ Training - ABM A/C 788 - WurfHazMat		\$2,987			\$10,313	\$5,500	\$13,417
10		241	HE Lab Analyses to Oper & Maint Fuel Feed System	\$10,286	\$12,279	\$12,502			\$13,102	\$8,777
11		875	HE Air Compliance	\$5,960	\$27,974	\$8,179			\$8,572	\$1,175
12		701	Forecasting-linked to 875 service order			\$1,121			\$300	\$307
13		735	Lobbying-linked to 875 service order			\$0				
14		876	HE WW Comp/Lab/Water Mon/ZOMM/WETT/Audits	\$30,079	\$29,507	\$34,236	26450		\$35,879	\$36,740
15			JC						\$27,720	\$28,385
16			JW				7786		\$8,760	\$9,358
17		877	HE Oil Comp/SPCC/OPA/AUDITS	\$4,975	\$6,950	\$5,922	1279		\$1,340	\$6,415
18			JC						\$4,665	\$4,992
19			JW				4642		\$5,622	\$5,664
20		878	HE Haz Waste Compliance (Non-oil)	\$5,906	\$4,060	\$5,269	2990		\$3,734	\$3,209
21			JC						\$2,388	\$2,446
22			JW				2279		\$0	\$0
23		879	HE Noise Compliance	\$83	\$0	\$0			\$10,000	\$0
24		865	HE Apply for Air Permits	\$0	\$0	\$98			\$0	\$0
25		866	HE Apply for Water Permits	\$411	\$205	\$62			\$998	\$1,022
26	Hill-RST			\$57,700	\$83,962	\$68,279			\$89,754	\$76,281
27										
28										
29	Kanoelohua-ANS									
30		875	HE Air Compliance	\$1,594	\$1,600	\$556			\$583	\$597
31		876	HE WW Comp/Lab/Water Mon/ZOMM/WETT/Audits	\$439	\$188	\$13			\$14	\$14
32		877	HE Oil Comp/SPCC/OPA/AUDITS	\$2,182	\$1,551	\$291			\$305	\$312
33		878	HE Haz Waste Compliance (Non-oil)	\$175	\$34	\$368			\$387	\$396
34		879	HE Noise Compliance	\$91	\$77	\$0			\$0	\$0
35		865	HE Apply for Air Permits	\$0	\$0	\$0			\$10,000	\$0
36		866	HE Apply for Water Permits	\$0	\$0	\$0			\$0	\$0
37	Kanoelohua-ANS			\$4,481	\$3,450	\$1,229			\$11,288	\$11,559
38										
39										
40	Keahole-CNS									
41		788	HE Conduct Environ Training - ABM A/C 788 - Air	\$0	\$0	\$0		\$9,000	\$0	\$0
42		788	HE Conduct Environ Training - ABM A/C 788 - WurfHazMat	\$0	\$0	\$0		\$10,313	\$4,500	\$4,608
43		875	HE Air Compliance	\$15,914	\$6,125	\$15,191			\$32,500	\$30,780
44		876	HE WW Comp/Lab/Water Mon/ZOMM/WETT/Audits	\$943	\$318	\$247	0		\$18,500	\$18,944
45			JC				247		\$7,300	\$7,475
			JW						\$11,200	\$11,469

A	C	H	I	J	K	L	M	N	O
PLANT	ACT	DESCRIPTION	1999 ACTUALS	2000 ACTUALS	2001 ACTUALS	2001 JC/JW Actuals	2002 Auth Training	2003 HECO ESTIMATES	(2003 X 1.024) 2004 HECO ESTIMATES
46	877	HE Oil Comp/SPCC/OPA/AUDITS	\$757	\$936	\$1,362			\$1,427	\$1,462
47		JC				292		\$306	\$373
48		JW				1070		\$1,121	\$1,148
49	878	HE Haz Waste Compliance (Non-oil)	\$689	\$603	\$1,107	0		\$3,660	\$3,748
50		JC				1107		\$0	\$0
51		JW						\$1,160	\$1,188
52	879	HE Noise Compliance	\$5,008	\$516	\$0			\$15,000	\$15,360
53	865	HE Apply for Air Permits	\$1,004	\$6,650	\$3,834			\$0	\$0
54	866	HE Apply for Water Permits	\$1,350	\$137	2311			\$0	\$0
55		Keahole-CNS	\$25,665	\$15,285	\$24,052			\$2,422	\$2,480
56								\$78,009	\$77,382
57									
58									
59		Puna Steam-PST					\$6,000		\$0
60	788	HE Conduct Environ Training - ABM A/C 788 - Air	\$0	\$0	\$0		\$10,312	\$4,500	\$4,608
61	785	HE Air Compliance	\$5,093	\$4,545	\$5,746			\$15,000	\$17,920
62	876	HE WW Compl/Lab/Water Mon/ZOM/WETT/Audits	\$9,247	\$10,218	\$11,371	8726		\$9,145	\$9,364
63		JC				2645		\$2,772	\$2,838
64		JW						\$2,502	\$2,562
65	877	HE Oil Comp/SPCC/OPA/AUDITS	\$367	\$6,170	\$2,387	144		\$151	\$155
66		JC				2243		\$2,351	\$2,407
67		JW						\$9,526	\$7,315
68	878	HE Haz Waste Compliance (Non-oil)	\$3,796	\$3,094	\$4,319	3558		\$3,729	\$3,878
69		JC				762		\$799	\$818
70		JW						\$2,500	\$2,560
71	879	HE Noise Compliance	\$83	\$0	\$0			\$0	\$0
72	865	HE Apply for Air Permits	\$80	\$0	\$1,668			\$0	\$0
73	866	HE Apply for Water Permits		\$15	123			\$129	\$132
74			\$19,666	\$24,042	\$26,614			\$48,574	\$47,359
75									
76									
77		Puna CT3-P03-PNS							
78	875	HE Air Compliance	\$5,705	\$1,908	\$4,376			\$15,000	\$15,360
79	876	HE WW Compl/Lab/Water Mon/ZOM/WETT/Audits	\$7,613	\$7,194	\$12,146	12146		\$3,000	\$3,072
80		JC				0		\$0	\$0
81		JW				0		\$0	\$0
82	877	HE Oil Comp/SPCC/OPA/AUDITS	\$0	\$96	\$0	0		\$0	\$0
83		JC				0		\$0	\$0
84		JW				0		\$0	\$0
85	878	HE Haz Waste Compliance (Non-oil)	\$44	\$281	\$411	411		\$2,931	\$3,001
86		JC						\$0	\$0
87		JW						\$2,500	\$2,560
88	879	HE Noise Compliance	\$0	\$0	\$0			\$0	\$0
	865	HE Apply for Air Permits	\$0	\$11	\$2,157			\$0	\$0

A	C	H	I	J	K	L	M	N	O
6 PLANT	ACT	DESCRIPTION	1999 ACTUALS	2000 ACTUALS	2001 ACTUALS	2001 JCIJW Actuals	2002 Auth Training	(2001 x 1.048) 2003 HECO ESTIMATES	(2003 x 1.024) 2004 HECO ESTIMATES
89	866	HE Apply for Water Permits	\$0	\$0	0			\$0	\$0
90			\$13,382	\$9,490	\$19,090			\$20,931	\$21,433
91									
92									
93	788	HE Conduct Environ Training - ABM A/C 788 - Air	\$0	\$0			\$0	\$0	\$0
94	788	HE Conduct Environ Training - ABM A/C 788 - Wtr/HazMat	\$0	\$0			\$10,312	\$4,500	\$4,608
95	875	HE Air Compliance	\$59,932	\$6,261	\$1,573			\$1,649	\$1,688
96	876	HE WW Comp/Lab/Water Mon/ZOMM/WETT/Audits	\$28,986	\$20,540	\$22,846	6142		\$23,943	\$27,077
97		JC				16704		\$6,437	\$6,591
98		JW						\$17,506	\$17,926
99		HE Oil Comp/SFCC/OPA/AUDITS	\$3,424	\$10,891	\$2,827	344		\$2,963	\$5,594
100		JC				2483		\$361	\$369
101		JW						\$2,602	\$2,665
102	878	HE Haz Waste Compliance (Non-oil)	\$1,692	\$1,060	\$1,875	246		\$1,965	\$4,572
103		JC				1630		\$258	\$264
104		JW						\$1,708	\$1,749
105	879	HE Noise Compliance	\$93	\$68	\$0			\$0	\$0
106	865	HE Apply for Air Permits	\$17	\$0	\$0			\$0	\$20,000
107	866	HE Apply for Water Permits	\$68	\$20	425			\$445	\$456
108			\$94,192	\$38,860	\$29,546			\$35,464	\$63,995
109									
110									
111	788	HE Conduct Environ Training - ABM A/C 788 - Air	\$0	\$0			\$3,000	\$0	\$0
112	788	HE Conduct Environ Training - ABM A/C 788 - Wtr/HazMat	\$0	\$0			\$0	\$2,048	\$2,048
113	875	HE Air Compliance	\$1,591	\$1,187	\$152			\$5,000	\$5,120
114	876	HE WW Comp/Lab/Water Mon/ZOMM/WETT/Audits	\$733	\$187	\$644			\$675	\$691
115	877	HE Oil Comp/SFCC/OPA/AUDITS	\$738	\$61	\$249			\$261	\$267
116	878	HE Haz Waste Compliance (Non-oil)	\$805	\$171	\$464			\$486	\$498
117	879	HE Noise Compliance	\$83	\$77	\$0			\$0	\$0
118	865	HE Apply for Air Permits	\$0	\$0	\$0			\$0	\$0
119	866	HE Apply for Water Permits	\$24	\$24	\$217			\$0	\$0
120			\$3,950	\$1,707	\$1,726			\$227	\$233
121								\$8,650	\$8,857
122									
123	865	HE Apply for Air Permits			70			\$73	\$75
124	875	HE Air Compliance	\$789	\$203	104			\$109	\$112
125	879	HE Noise Compliance	\$0	\$0	\$0			\$0	\$0
126			\$789	\$203	174			\$182	\$187
127									
128									
129	865	HE Apply for Air Permits			70			\$73	\$75
130	875	HE Air Compliance	\$653	\$158	\$78			\$82	\$84
131	879	HE Noise Compliance	\$0	\$0	\$0			\$0	\$0

	A	C	H	I	J	K	L	M	N	O
	PLANT	ACT DESCRIPTION	1999 ACTUALS	2000 ACTUALS	2001 ACTUALS	2001 JC/JW Actuals	2002 Auth Training	(2001 x 1.048) 2003 HECC ESTIMATES	(2003 x 1.024) 2004 HECC ESTIMATES	
132			\$653	\$158	\$148			\$155	\$159	
133										
134										
135	Punaluu D26	HE Apply for Air Permits			70			\$73	\$75	
136		HE Air Compliance	\$463	\$158	\$92			\$96	\$99	
137		HE Noise Compliance	\$0	\$0	0			\$0	\$0	
138			\$463	\$158	162			\$170	\$174	
139										
140	Kapua D27	HE Apply for Air Permits			70			\$73	\$75	
141		HE Air Compliance	\$529	\$123	\$92			\$96	\$99	
142		HE Noise Compliance	\$0	\$0	0			\$0	\$0	
143			\$529	\$123	162			\$170	\$174	
144										
145										
146			\$220,650	\$177,438	\$171,182			\$293,348	\$307,560	

Cell: K13
Comment: carol thomas:
Activities 701 and 735 use service order of 875

Cell: N18
Comment: carol thomas:
JA Hill assumes RCRA Used Oil Audit 60 hrs = \$2500.

Cell: O18
Comment: carol thomas:
JA: Hill Assumes no audit reqd.

Cell: N25
Comment: HECO:
BN: Hill Support air permit renewal (exp 5/03)

Cell: N35
Comment: HECO:
BN: Kanoe support air permit renewal (exp 5/03)

Cell: N42
Comment: HECO:
BN: Keahole Increased due to 3 new CSPs issued in 2001/2002.
JA CAA AUDIT: 60 hrs = \$2,500

Cell: O42
Comment: carol thomas:
JA: Keahole No audit assumed.

Cell: N44
Comment: HECO:
JC: Keahole Bi-monthly analyses on UIC monitoring samples.

Cell: O44
Comment: HECO:
JC: Keahole Bi-monthly analyses on UIC monitoring samples.

Cell: N45
Comment: ktomita:
\$2200 non labor - travel and equipment
300 hours - monitoring, reporting, gen compliance
(bi-monthly sampling)

Cell: N49
Comment: carol thomas:
JA: Keahole EPCRA Tier II Audit 60 hrs = \$2,500

Cell: O49
Comment: carol thomas:
JA: Keahole assumes EPCRA TRI audit = \$2660

Cell: N52
Comment: HECCO:
BN: Keahole Noise activities transferred from capital to O&M with completion of CT4/5 capital project

Cell: N61
Comment: HECCO:
BN: Puna increased due to new CSP issued in 2001/2002

Cell: O61
Comment: carol thomas:
JA: Puna assumes CAA audit 60 hrs = \$2560

Cell: N62
Comment: carol thomas:
JA: Puna assumes SDWA UIC Audit 60 hrs = \$2500

Cell: O62
Comment: carol thomas:
JA: Puna assumes no audit.

Cell: N68
Comment: carol thomas:
JA: Puna assumes EPCRA TRI & RCRA Waste audits 120 hrs = \$5000

Cell: O68
Comment: carol thomas:
JA: Puna assumes EPCRA Tier II audit 60 hrs = \$2560

Cell: N71
Comment: HECCO:
Expected need for additional support

Cell: N77
Comment: HECCO:
Increased due to new CSP issued in 2001/2002

Cell: N78
Comment: HECCO:
Deminerlized water samples will be sent in on an as-needed basis for cation/anion analysis, instead of weekly.

Cell: N79
Comment: HECCO:
Deminerlized water samples will be sent in on an as-needed basis for cation/anion analysis, instead of weekly.

Cell: O79

Comment: HECO: Demineralized water samples will be sent in on an as-needed basis for calcium/anion analyses instead of weekly.

Cell: N86
Comment: HECO: Expedied need for additional support

Cell: O96
Comment: carol thomas:
JA: Assumes SDWA UIC audit 60 hrs = \$2560

Cell: O99
Comment: carol thomas:
JA: Assumes RCRA UST audit at Shipman 60 hrs = \$2560

Cell: O102
Comment: carol thomas:
JA: Assumes RCRA Used Oil Audit 60 hrs = \$2560

Cell: O106
Comment: HECO:
Permit renewal activities (exp 10/05)

Cell: N113
Comment: HECO:
Increased due to new CSP issued in 2002

CA-IR-66

Ref: HELCO T-5, page 71, lines 16-18; Production Maintenance Expense.

According to the testimony, “The budget for production maintenance expense is the summation of the labor and non-labor forecasts for work to be done by maintenance personnel at five generating stations and three non-firm generating stations.” Please provide the following:

- a. State whether there is any objective overall measure of “work to be done” that can be documented, or if instead measurement of required “work to be done” is a subjective determination based upon knowledge of project backlogs, equipment condition, outage schedules, etc.
- b. Provide a complete copy of all documents that exist (if any) to quantify overall “work to be done” in 2006 pursuant to the forecast, in comparison to measures of amounts of work that was done in 2004 or in 2005.
- c. Explain how HELCO management tracks and monitors production maintenance workloads during in the normal course of business.
 1. Relative to specific approved maintenance project work backlogs;
 2. Measuring progress against prioritized preventive and predictive maintenance objectives; or
 3. Other measures used to optimize maintenance resources.
- d. Provide specimen copies of the primary documents used in the processes described in your response to part (c) of this information request, as of 12/31/2004 and 12/31/2005.
- e. Using the documents provided in response to part (d) of this information request, explain whether actual maintenance spending levels in 2005 produced positive or negative progress in achieving the maintenance goals established by management.

HELCO Response:

- a. At the highest level, statements of priorities were issued to the combustion turbine and diesel (“CT&D”) and steam and hydro (“S&HU”) Maintenance Supervisors in mid-2004; see pages 3 to 6. The measures of the effectiveness of the maintenance work are the reliability statistics (i.e., AF, FOR, and Failed Starts, as shown in HELCO-515 to 518). Note that the focus is on the trends, not on the absolute values. For detail on work planned and work

done, refer to the workpapers used for Capital and O&M budgets and reports for each unit, each year as provided in response to HELCO T-5, CA-IR-1 and CA-IR-2.

- b. Documents do not exist to quantify overall “work to be done” in 2006 pursuant to the forecast, in comparison to measures of amounts of work that was done in 2004 or in 2005.
- c. Please refer to HELCO response to CA-IR-52.
- d. Please refer to HELCO response to CA-IR-52.
- e. The measures of the effectiveness, as stated in response a, of the maintenance work are the reliability statistics (i.e., AF, FOR, and Failed Starts, as shown in HELCO-515 to 518). As these trends go down (i.e., the number of failed starts and forced outages go down each year), this is primarily attributable to the effectiveness of maintenance.



Hawaii Electric Light Co., Inc.

June 15, 2004

TO: Paul Pikini, CT&D Maintenance Supervisor

FROM: Dan V. Giovanni, Production Manager

SUBJECT: CT&D Maintenance Priorities

CT&D Maintenance has been very responsive to the needs of the department, particularly for breakdown maintenance, call-outs, and support of the CT4 and CT5 commissioning activities. For this you and your crews are to be complimented.

The purpose of this memorandum is to clarify the priorities for your group going forward from my perspective. The company will be making a significant investment in improving the reliability of its combustion turbines and diesel engines. The priorities are to achieve significant improvements in the following categories of reliability:

- Failed starts (reduced)
- Unit Trips (reduced)
- Forced Outages (fewer and shorter duration)

We need to develop and perform the maintenance so that failed starts and unit trips are prevented, and when forced outages occur the units are returned to service as soon as practical.

Attached for your reference, please find a summary of reliability statistics for each of HELCO generating units for 2004 through June 6. The diesel fleet is used primarily for fast-starting in case there is an upset condition (e.g., trip of a steam unit or CT) on the system. Hence, it is very important that the diesels start and stay on line when Operations "pushes the button." As you can see from the statistics, so far this year the diesel fleet has experienced 74 failed starts and 89 unit trips. On Page 4, you can observe the most troublesome units and I suggest that these units should be the ones where you concentrate your resources.

Similarly, the CT's are often started during system emergencies and it's very important that these units successfully start and come on line the first time that Operations

CONTINUED: CT&D Maintenance Priorities

“pushes the button.” This is particularly true for CT-1 which is only used during system emergencies. As you can see from the statistics, so far this year the CT's has experienced 28 failed starts and 16 unit trips.

Reliability statistics will be provided to you on a regular basis going forward. Copies of these summaries will be provided to Mari for posting in the maintenance shops. This information will help us monitor the progress to improve reliability and guide the allocation of our maintenance resources.

I look forward to working with you and your crews to develop and implement changes in maintenance practices to improve this record.



Hawaii Electric Light Co., Inc.

June 15, 2004

TO: Andy Ho, S&HU Maintenance Supervisor

FROM: Dan V. Giovanni, Production Manager

SUBJECT: S&HU Maintenance Priorities

S&HU Maintenance has been responsive to the needs of the department, particularly for breakdown maintenance, call-outs, and startup support. For this you and your crews are to be complimented.

The purpose of this memorandum is to clarify the priorities for your group going forward from my perspective. The company will be making significant investments to improve the reliability of its steam and hydroelectric units. The priorities are to achieve significant improvements in the following categories of reliability:

- Forced Outages (fewer and shorter duration)
- Unit Trips (reduced)
- Unit Availability Factor (higher)

We need to develop and perform the maintenance so that unit trips are prevented, that when forced outages occur the units are returned to service as soon as practical, and that all critical shutdown maintenance is completed during scheduled overhauls.

Attached for your reference, please find a summary of reliability statistics (Forced Outage Rate, Availability Factor, Service Hours, Failed Starts, and Unit Trips) for each of HELCO generating units for 2004 through June 6. The steam units are used primarily base load and system regulation. The primary statistic for you to focus upon is forced outage rate, and the goal is a forced outage rate < 3% for each and all of the steam units. I hope that we can attain this goal as soon as 2006. Your resources should be concentrated on those items that will lead to reductions in forced outages on the steam units.

CONTINUED: S&HU Maintenance Priorities

The company has decided to accelerate GAM projects that will lead to continuous operation and possible re-manning of Shipman Plant as soon as 2006. Hence, a high priority is to be placed on completing GAM projects and all other shutdown maintenance items during scheduled overhauls in 2004 and 2005.

Reliability statistics will be provided to you on a regular basis going forward. Copies of these summaries will be provided to Mari for posting in the maintenance shops. This information will help us monitor the progress to improve reliability and guide the allocation of our maintenance resources.

I look forward to working with you and your crews to develop and implement changes in maintenance practices to improve our record.

CA-IR-67

Ref: HELCO T-5, page 71, Lines 1-3; Production Operations Expenses.

According to the testimony, “The estimate is reasonable because it was derived from a review of the resources required to operate HELCO’s generating units reliably and efficiently while complying with all environmental and other regulatory agencies.” Please respond to the following:

- a. Provide complete copies of all documentation produced in the referenced “review of the resources required,” to the extent not provided in response to other information requests.
- b. Explain and provide copies of all documentation for any specific changes in the “resources required” in test year 2006, relative to 2005.
- c. State whether HELCO successfully operated all of its generating units reliably and efficiently while complying with all environmental and other regulatory agencies in 2004 and in 2005.

HELCO Response:

- a. Documents pertaining to staff expansions at Keahole and Shipman Power Plants are the primary reference for this response. The operations division was reorganized prior to the Keahole expansion. This was based on an interoffice communication from Dan Giovanni to Warren Lee, dated February 2002, and finalized as documented in HELCO T-5’s response to CA-IR-1, HELCO T-5, Attachment 6. For additional detail and records, see Attachments 1 and 2. The requested information is confidential and will be provided pursuant to Protective Order No. 22593, dated June 30, 2006.
 1. With respect to Keahole staffing, see Attachment 1, pages 1-5, Production Department IOC dated May 23, 2002, re: Keahole Manning Recommendations; Attachment 1, pages 6-7, Production Department IOC dated May 23, 2002 re: Keahole Operations Supervisor; Attachment 1, pages 8-12, re: Supporting Production Department Operations Division Memo dated May 16, 2003 re: Plant Operation and Manning

Recommendations; response to CA-IR-73 re: Keahole Maintenance Staffing.

2. With respect to Shipman Operators, see response to CA-IR-59; Attachment 2, page 1, Production Department E-mail dated October 4, 2005 re: Shipman Manning on Overtime; Attachment 2, pages 2-3, Production Department Memo dated February 9, 2005 re: Manning Requirements for 2005; Attachment 2, pages 4-6, Production Department IOC dated January 25, 2005, re: 2006 Operations Manning.

The testimony also refers to the addition of a Resource Planner in the Technical Services Division. See HELCO T-5, pages 63 and 65. HELCO-539 and the response to CA-IR-61 address additional labor hours budgeted for Production Operations (HGA, HGT, HGC, HGH, HGP and HGW), and the response to CA-IR-48 tracks the changes in staffing levels, by quarter, for these RA's.

- b. In general, the work activities that result in Production O&M expenses involve operating and maintaining HELCO's generating units, maintaining its generating stations, and administering and negotiating power purchase agreements. See HELCO T-5, pages 60-61 (Operations) and pages 76-77 (Maintenance).

The level of Production Operations work has increased in the last few years due to factors such as:

1. The operation of the new Keahole combustion turbines. Staff was added in 2004, when the two units went into commercial operation, and a Power Plant Supervisor was added in 2005. See HELCO T-5, pages 25 and 66; response to CA-IR-67.a.
2. The operation of Shipman 3 and 4 two shifts per day, 7 days per week. See HELCO T-5, pages 46, 62, 63, 64, 65, 66, 66-67 and 69; responses to CA-IR-59 and CA-IR-67.a.
3. The continued operation of some of HELCO's older generating units that had been

scheduled for retirement and/or standby status. See HELCO T-5, pages 17-20, 46-47 and 47-48.

The testimonies and responses to other IRs contain detailed information regarding other changes in Production Operations expenses. For example, staffing changes are shown on a quarterly basis in the response to CA-IR-48, and labor hours for the sections that contribute to Production Operations expenses are discussed in the response to CA-IR-61.

- c. Considering the age and type of generating equipment presently on line it can be stated that HELCO operated its units in a safe and reliable manner according to the generally accepted practices and by industry standards. HELCO brought online the available intermediate generation according to the economic commitment order while considering operational constraints. The HELCO steam units, gas turbines, and diesels are dispatched by Automatic Generation Control according to Economic Dispatch, which minimizes the production cost. Exceptions are made only for unusual conditions prohibiting remote control, testing, or other special circumstances. Although there were occasions where an equipment malfunction or operating condition at one of the plants may have caused a momentary deviation from the Covered Source Permit (CSP), these were all properly reported to the Department of Health (“DOH”) and documented. There were no other incidents involving the other permits by which HELCO must operate its plants by (NPDES, SPCC, RCRA, OPA, and UIC; refer to HELCO-523 for a glossary of terms). It is fair to state that HELCO complied with its various environmental permits. Moreover, reliability has been demonstrated through continued improvement from early 2004 through 2005, as discussed in HELCO T-5.

Confidential Information Deleted
Pursuant to Protective Order No. 22593.

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Confidential Information Deleted
Pursuant to Protective Order No. 22593.

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CA-IR-68

Ref: HELCO-539 and HELCO T-5, page 71, Lines 3-6; Production Operations Reduced Overtime.

- a. Please explain with specificity how and within which RAs overtime is being reduced in test year 2006, relative to prior year overtime levels, due to “increasing the staffing to allow 14 shifts per week of Shipman...”
- b. Explain why the “2006 Budget” for Overtime Hours and the Proportion OT/ST Hrs % shown is higher than 2005 actual values.
- c. Why is there no reduction in overtime achieved in the 2006 Budget?

HELCO Response:

- a. Explanations are provided in HELCO’s responses to CA-IR-61 h. and CA-IR-62.
- b. The 2006 budget for labor and overtime hours was prepared in the January to March timeframe of 2005. It was based on historical actual hours through 2004. Attachment 1 shows a comparison of 2004 actual hours versus 2006 budgeted hours. The variance illustrates a great shift in the proportion of OT/ST Hrs % among the RA’s as a result of the planned manning of Shipman. For much of 2005, the Shipman 3 and 4 units were either on dry lay-up or on overhaul (see HELCO-526) which contributed to the slight decrease in 2005 actual values.
- c. Explanations are provided above and in HELCO’s response to CA-IR-62.

Hawaii Electric Light Company Inc.
Rate Case - Test Year 2006
Labor Overtime

RA	RA Desc	2004 Actual		2004 Actual		2004 Actual		2006 Budget		2006 Budget		2006 Budget		Proportion OT/ST Hrs %
		Overtime Hours	Straight Time Hours											
HGA	Admin-Prod O&M	4,940	23,523	5,470	29,120	530	5,597	19%	19%	530	5,597	-2%		
HGT	Technical	397	7,947	161	8,320	-236	373	2%	2%	-236	373	-3%		
HGC	Keahole Stn Oper	4,541	9,267	5,840	16,640	1,299	7,373	35%	35%	1,299	7,373	-14%		
HGH	Hill Stn Oper	15,839	46,587	15,580	49,920	-259	3,333	31%	31%	-259	3,333	-3%		
HGP	Puna Stn Oper	7,288	18,687	6,680	20,800	-608	2,113	32%	32%	-608	2,113	-7%		
HGW	Shipman Stn Oper			4,704	16,640	4,704	16,640	28%	28%	4,704	16,640	28%		
HGK	Keahole Stn Maint	4,287	8,749	6,200	16,640	1,913	7,891	37%	37%	1,913	7,891	-12%		
HGM	St/Hy Maint	7,415	33,702	9,940	37,440	2,526	3,738	27%	27%	2,526	3,738	5%		
HGX	CT&D Hilo Maint	3,791	11,149	7,760	16,640	3,969	5,491	47%	47%	3,969	5,491	13%		
TOTAL		48,497	159,609	62,335	212,160	13,838	52,551	29%	29%	13,838	52,551	-1%		

CA-IR-69

Ref: HELCO-539; O&M hours by Production RA.

- a. Please provide a "Breakdown of Straight Time Hours" table, as set forth on page 2 of the Exhibit for 2006, for each of the prior Actual years 2003, 2004 and 2005.
- b. In addition, please provide a corresponding "Breakdown of Overtime Hours" table isolating "O&M Hrs" from "All Oth Hrs" for overtime in each actual year 2003-2005 and for the test year 2006.

HELCO Response:

- a. See Attachment 1 to this response.
- b. It is impossible to isolate "O&M Hrs" from "All Oth Hrs" for overtime. The method of data entry from daily timesheets does not distinguish what each individual's overtime hours are worked for (i.e., O&M, capital, etc.).

Hawaii Electric Light Company Inc.
Rate Case - Test Year 2006
Labor Overtime

<u>RA</u>	<u>RA Desc</u>	<u>Overtime Hours</u>	<u>Straight Time Hours</u>	<u>Proportion OT/ST Hrs %</u>
2003 Actual				
HGA	Admin-Prod O&M	3,073	21,300	14%
HGT	Technical	129	7,640	2%
HGC	Keahole Stn Oper	801	4,028	20%
HGH	Hill Stn Oper	12,915	44,516	29%
HGP	Puna Stn Oper	8,655	23,952	36%
HGW	Shipman Stn Oper			0%
HGK	Keahole Stn Maint	2,467	6,832	36%
HGM	St/Hy Maint	11,519	37,547	31%
HGX	CT&D Hilo Maint	2,904	6,720	43%
TOTAL		42,463	152,535	28%

2003 Actual - Breakdown of Straight Time Hours			
	<u>O&M Hrs</u>	<u>All Oth Hrs</u>	<u>Total</u>
HGA Admin-Prod O&M	20,741	558	21,300
HGT Technical	7,237	403	7,640
HGC Keahole Stn Oper	4,028		4,028
HGH Hill Stn Oper	43,651	866	44,516
HGP Puna Stn Oper	23,952		23,952
HGW Shipman Stn Oper	0		0
HGK Keahole Stn Maint	5,234	1,598	6,832
HGM St/Hy Maint	19,693	17,854	37,547
HGX CT&D Hilo Maint	4,240	2,480	6,720
TOTAL	128,776	23,759	152,535

Hawaii Electric Light Company Inc.
Rate Case - Test Year 2006

Labor Overtime

<u>2004 Actual</u>	<u>Overtime Hours</u>	<u>Straight Time Hours</u>	<u>Proportion OT/ST Hrs %</u>
HGA Admin-Prod O&M	4,940	23,523	21%
HGT Technical	397	7,947	5%
HGC Keahole Stn Oper	4,541	9,267	49%
HGH Hill Stn Oper	15,839	46,587	34%
HGP Puna Stn Oper	7,288	18,687	39%
HGW Shipman Stn Oper			0%
HGK Keahole Stn Maint	4,287	8,749	49%
HGM St/Hy Maint	7,415	33,702	22%
HGX CT&D Hilo Maint	3,791	11,149	34%
TOTAL	48,497	159,609	30%

<u>2004 Actual - Breakdown of Straight Time Hours</u>			
	<u>O&M Hrs</u>	<u>All Oth Hrs</u>	<u>Total</u>
HGA Admin-Prod O&M	20,211	3,311	23,523
HGT Technical	6,145	1,802	7,947
HGC Keahole Stn Oper	7,819	1,447	9,267
HGH Hill Stn Oper	46,070	517	46,587
HGP Puna Stn Oper	18,618	68	18,687
HGW Shipman Stn Oper	0		0
HGK Keahole Stn Maint	5,747	3,002	8,749
HGM St/Hy Maint	23,121	10,582	33,702
HGX CT&D Hilo Maint	8,783	2,366	11,149
TOTAL	136,514	23,095	159,609

Hawaii Electric Light Company Inc.
Rate Case - Test Year 2006
Labor Overtime

<u>2005 Actual</u>		Overtime	Straight Time	Proportion
		<u>Hours</u>	<u>Hours</u>	<u>OT/ST Hrs %</u>
HGA	Admin-Prod O&M	2,982	25,539	12%
HGT	Technical	6	8,403	0%
HGC	Keahole Stn Oper	5,200	12,909	40%
HGH	Hill Stn Oper	12,197	45,617	27%
HGP	Puna Stn Oper	6,882	20,474	34%
HGW	Shipman Stn Oper			0%
HGK	Keahole Stn Maint	5,456	11,399	48%
HGM	St/Hy Maint	5,443	33,635	16%
HGX	CT&D Hilo Maint	3,210	13,513	24%
TOTAL		41,376	171,489	24%

<u>2005 Actual - Breakdown of Straight Time Hours</u>				
		<u>O&M Hrs</u>	<u>All Oth Hrs</u>	<u>Total</u>
HGA	Admin-Prod O&M	25,042	497	25,539
HGT	Technical	4,997	3,406	8,403
HGC	Keahole Stn Oper	12,909		12,909
HGH	Hill Stn Oper	45,617		45,617
HGP	Puna Stn Oper	20,474		20,474
HGW	Shipman Stn Oper	0		0
HGK	Keahole Stn Maint	6,604	4,796	11,399
HGM	St/Hy Maint	20,198	13,437	33,635
HGX	CT&D Hilo Maint	9,066	4,447	13,513
TOTAL		144,907	26,582	171,489

CA-IR-70

Ref: HELCO 527 Production Maintenance Schedule – Test Year.

- a. Please provide the labor hours by RA and non-labor costs by RA for each schedule overhaul in the test year, before and after the “normalization” adjustments described in the “notes.”
- b. If any revisions have been made to the Overhaul Schedule and related cost estimates since the preparation of the Company’s rate filing, please identify and quantify each change and explain whether such revisions are properly recognized in the rate case Docket.

HELCO Response:

- a. Labor hours by RA and non-labor costs by RA for each scheduled overhaul in 2006 (reflected in HELCO-527) were provided in HELCO CA-IR-2, Attachment 1A, pages 5 to 8. The related “normalization” adjustments described in HELCO-WP-510, page 8 were made against overhaul non-labor. There were no “normalization” adjustments made to overhaul labor.
- b. Revisions have been made to the 2006 Overhaul Schedule in terms of the timing of initiation and completion dates of the overhauls. However, overhauls on HELCO-527 are still scheduled for completion in 2006. This does not change the related cost estimate of each overhaul, and thus, all overhaul costs in the Company’s rate filing are properly recognized in HELCO T-5.

CA-IR-71

Ref: HELCO T-5, page 72, Line 17.

According to the testimony, “The increase between the 2005 actual and test year 2006 is mainly attributed to a vacancy due to a termination and an increase in maintenance staffing to support maintenance crews at Kanoelehua and Keahole Power Plants to perform off-peak maintenance, and higher volumes of work attributed to concurrent and back-to-back schedule and unscheduled outages.” Please provide the following information:

- a. Explain the extent to which added employees are for the replacement of vacancies.
- b. Provide complete copies of all studies, reports, analyses, workpapers, projections, correspondence and other documentation supporting the decision to fill each of the vacancies identified in your response to part (a) of this information request.
- c. Explain and quantify the additional labor hours to perform off-peak maintenance, indicating whether any maintenance work has been deferred from years prior to 2006, to now be done in 2006.
- d. Explain and quantify the extent to which higher staffing for maintenance is intended to remedy high overtime rates experienced in 2004 and 2005 and quantify the cost savings in avoided overtime expense that is reflected in the budget for such savings.

HELCO Response:

- a. The added employee for the “replacement of a vacancy” (Maintenance Supervisor (CT&D) – Kanoelehua) was discussed in HELCO T-5, pages 73, 74 and 77.
- b. Available information was already provided in the attachments to the response to CA-IR-73.
- c. Although the responses to CA-IR-1, subpart e. (HELCO T-5) and CA-IR-52 explain maintenance work that has been deferred, labor hours are budgeted in terms of project and non-project related work. It is not possible to separate out the hours attributed to performing off-peak maintenance.
- d. Higher staffing for maintenance is discussed in HELCO T-5, pages 74 to 75, and in the response to CA-IR-48. Further, it is not possible to quantify the extent to which higher staffing for maintenance is intended to remedy high overtime rates in 2004 and 2005

because the maintenance staffing levels forecasted were based on the numbers of specific trades and craft personnel required to keep up with anticipated increased workload requirements. Comparing the 2006 test year forecasted OT percentages with actual historical trends indicates a decrease in OT % for the Keahole Station Maintenance RA with the expected fully staffed maintenance crew. It should be noted that actual OT is not only a function of staffing levels, but also a function of work requirements to keep generating units operational and in compliance (environmental, safety, operating conditions) on a 24x7 basis. Also, units down for overhaul, maintenance outages or forced outages contribute to OT trends as work is done on weekends, holidays, outside of normal business hours, and on a call out basis. Unit outages are sometimes overlapped, or stacked, to accomplish normal and emergency maintenance such as when a generating unit is out of service for a scheduled overhaul, and another unit experiences a forced outage concurrently. This can result in minimal loss of largest unit generation margin, requiring manpower to be removed from the scheduled outage work to respond to and restore to service the unit that is on a forced outage. During such periods of labor shortfall, man-hour deficits are made up with OT and/or contract services. Overtime hours thus fluctuate as all available time and resources are utilized to perform the necessary work. This reality is one of the major differences between the typical mainland interconnected grid system and an island grid system such as HELCO's (or HECO and MECO) that must be self sufficient.

CA-IR-72

Ref: HELCO T-5, page 75, Lines 10-16.

- a. Please state with specificity what is meant by “anticipated increased workload requirements” in 2006, relative to previous years, indicating separately the known cause for each discrete increase in workload that is budgeted.
- b. For each workload increase element identified in your response to part (a) of this information request, provide the additional hours by RA that are included in the 2006 forecast.
- c. State specifically what is meant by “a function of work requirements” and provide a detailed statement of each measure of “work requirements” that was quantified in preparing the 2006 labor forecasts.

HECO Response:

- a. As is indicated in HELCO T-5, pages 71-72, Other Production Maintenance Expenses include expenses for the labor and non-labor work to be done by maintenance personnel at five generating stations and three non-firm generating stations. Two generating stations - Kanoelehua and Keahole - have a permanently assigned maintenance staff. There are two separate groups at Kanoelehua, the steam and hydro (“ST&H”) group, and east side combustion turbine and diesel (“CT&D”) group. The maintenance group in Keahole is the west side combustion turbine and diesel (“CT&D”) group. These three station maintenance groups are responsible for operational maintenance performed on their respective units on a day-to-day basis and for overhauls. They are also available to support station maintenance work on any unit and/or emergencies if called upon to do so.

The level of work to be accomplished by HELCO’s maintenance staff has increased in the last few years due to factors such as:

1. The maintenance of the new Keahole combustion turbines. Staff was added in 2004, when the two units went into commercial operation, and additional staff was added in

2005 and is slated to be added in 2006. See HELCO T-5, pages 25, 66 and 73-74;

HELCO-542; responses to CA-IR-46 and CA-IR-67.a. Authorized Maintenance Staff has been increased from four (4) at the end of 2003 to eight (8) at the present time.

Actual Maintenance Staff at the end of 2003 was three (3), due to a vacancy.

2. The continued operation and maintenance of some of HELCO's older generating units that had been scheduled for retirement and/or standby status. HELCO T-5, pages 17-20, 46-47 and 47-48. One consequence has been the addition of Hilo-based maintenance staff, HELCO T-5, pages 67 and 73-74; responses to CA-IR-46 and CA-IR-73. The authorized CT and Diesel Maintenance Staff at Kanoelehua was six (6) at the end of 2003 and is now eight (8). The authorized Steam and Hydro Staff at Kanoelehua was 16 at the end of 2003 and is now 18.
3. The work being done on the older generating units through the GAM program to improve the reliability and availability of the older generating units. See HELCO T-5 at 33-36; response to CA-IR-49.
4. With the inception of Predictive Maintenance (PdM) and Preventative Maintenance (PM) activities in the steam plants, along with the Corrective Maintenance (CM) that is more typically performed, additional time is required to complete work. See HELCO T-5, pages 38-43, 52-53.

The additional work has been or will be accomplished by the addition of Maintenance Staff, as noted above and as shown in the response to CA-IR-48, the continuation of and, in some instances, increases in overtime, and the continued use of contract services. See HELCO T-5, pages 74-75 (overtime) and pages 75-76 (outside services).

The actual Maintenance headcount as of the end of 2005 was thirty (30), and as of March 31, 2006 was 31. The delay in the filling of the new positions and/or in filling vacancies will not necessarily result in lower maintenance costs than those included in the test year estimate. During the time that those positions remain vacant, the Company can incur unbudgeted overtime hours or use contract outside labor to get the work done.

HELCO T-5, pages 78-79; response to CA-IR-75.

This work load is further increased when Independent Power Producers (IPP) contracted power outputs are not present. For example, Puna Geothermal Ventures (PGV) currently has a 10 MW de-rating which began on July 5, 2006. PGV has provided its updated overhaul schedule to HELCO as provided on page 5 of this response and it will be further de-rated to output levels as low as 16 MW. Although PGV anticipates restoring full production once the production wells are restored, positive indication of this will not occur until October 2006. Additionally, Hamakua Energy Partners (“HEP”), has also incurred several forced outages this year that were the result of steam turbine and combustion turbine problems. HEP is scheduled for a 2 week period of outages in August to address a new occurrence of steam turbine vibration and perform scheduled maintenance on their combustion turbines. The above two instances are examples of requiring other HELCO generation to operate more hours and consume more fuel than anticipated. Although maintenance can not always be performed in a timely manner resulting from these increased operational situations, generally on intermediate units, the necessary maintenance is then performed when the unit becomes available, normally in the off peak time periods, which will result in increased overtime expenses. This results in the accordant additional maintenance necessary to keep HELCO generation equipment in an operational state while

maintaining operating permit compliances.

- b. The increased workload is reflected in the labor hours shown in HELCO-539 for HGK, HGM, and HGX, which labor hours are further addressed in the response to CA-IR-61.
- c. Refer to responses a. and b. above.

PGV 2006 Scheduled Maintenance

Revision: No.8 8/11/06 *WWE 11 AUG 06*

UNIT	DATE	WEEKS	DESCRIPTION	AVAILABLE PLANT OUTPUT
OEC-23	Jan 2-6	5 Days	Annual PM's	~27.5 MW's
OEC-25	Jan 16-20	5 Days	Annual PM's	~27.5 MW's
OEC-24	Jan 30-Feb 3	5 Days	Annual PM's	~27.5 MW's
OEC-14	Mar 20-24	5 Days	Annual PM's	~27.5 MW's
OEC-15	Apr 3-7	5 Days	Annual PM's	~27.5 MW's
PLANT	Apr 24-30	7 Days	Semi-Annual Maintenance	0 MW's
TEST	8-May	4 hrs	Production Deliverability Testing	15-27 MW's
OEC-12	May 9-12	4 Days	Annual PM's	~27.5 MW's
OEC-13	May 15-19	5 Days	Annual PM's	~27.5 MW's
OEC-21	Jun 26-30	5 Days	Annual PM's	~27.5 MW's
OEC-12 & 14	Jul 10-14	5 Days	Vaporizer Head Gasket Replacement	~22 MW's
OEC-21	Jul 17-21	5 Days	Generator Seal Replacement	~22 MW's
OEC-24	Jul 31-Aug 2	5 Days	Vaporizer Head Gasket Replacement	~22 MW's
OEC-22	Aug 14-18	5 Days	Annual PM's	~22 - 16 MW's
OEC-11	Aug 28-Sep 1	5 Days	Annual PM's	~16 MW's
OEC-12	Sep 18-Sep29	12 Days	Steam Turbine Overhaul	~16 - 22 MW's
PLANT	18-Oct		KS-5 back in service	30 MW's
PLANT	Oct 30-Nov 5	7 Days	Semi-Annual Maintenance	0 MW's

CA-IR-73

Ref: HELCO T-5, page 75, Lines 18-25.

Please provide a complete copy of all studies, reports, analyses, workpapers and other information relied for the following statements in testimony.

- a. "The levels of outside services costs is expected to remain high and/or increase due to the need to overlap unit outages," even though staffing levels are being increased.
- b. "HELCO's additional staffing requirements forecasted in 2006 is the minimum staffing level required to keep up with multiple planned outages (PO), maintenance outages (MO) and the occasional forced outage (FO)."

HELCO Response:

- a. Even though staffing levels are being increased, refer to the 2006 Overhaul Schedule (Rev. #5) in Attachment 2 of HELCO CA-IR-77, which show the incidents of overlapping outages. When this occurs the maintenance staff is taxed. Outside services will remain high and/or increase even with staff increases because more maintenance work will be performed than in previous years (Keahole expansion, GAM, etc) and not just for overlaps, as discussed in HELCO T-5, pages 75 to 77 and HELCO CA-IR-66, 71, 72 and 74. HELCO will likely remain dependant on outside specialists for many tasks. This includes metal fabrication and erection, painting services, steam and combustion turbine experts, electrical equipment testing services, electrical installations, equipment vibration analysis (as a part of steam plant Asset Optimization), along with technical experts and consultants for machinery health assessments (non destructive testing), personnel training and compliance with regulations and laws.
- b. To support the statement that "HELCO's additional staffing requirements forecasted in 2006 is the minimum staffing level required," nine (9) maintenance personnel positions are referenced in CA-IR-73, Attachment 1. CA-IR-73, Attachment 1 is confidential and will be

provided pursuant to Protective Order No. 22593, dated June 30, 2006. First, the Maintenance Superintendent position was requested to be filled. See Attachment 1, pages 1-2, HELCO IOC dated 2/24/04, re: Maintenance Superintendent. Since the reorganization of the maintenance division in 2002 into equipment lines, Combustion Turbines and Diesel Engines (CT&D) and Steam and Hydro (S & H) units, the Production Department Manager was also the acting Maintenance Superintendent. This is a challenging assignment for a dedicated individual, a very difficult assignment for the Department Manager to do in conjunction with his duties as well. Thus, this position was filled on August 30, 2004. Previously, three (3) additional maintenance personnel are requested to be manned. These include a CT&D Engine Mechanic, and a Machinist and a second Auto Control Mechanic in the S&H section. See Attachment 1, pages 3 – 6, HELCO IOC dated 3/1/04, re: Additional Permanent Position(s) in the Production Department. These positions were required to allow for continuity of work in the event of sick leave, vacations, and other potential losses of personnel. In some instances, this allowed for the splitting up of a three man crew into two 2 man crews to better address the work load. It was initially determined that a single CT&D Assistant Maintenance Superintendent would be able to effectively coordinate all maintenance activities for both East Hawaii CT&D maintenance and West Hawaii CT&D maintenance. See Attachment 1, pages 7 – 9, HELCO IOC dated 2/23/05, re: CT&D Maintenance Supervisors. With a minimum 4 – 5 hour round trip, this was difficult for a single person to coordinate. This had been attempted for several years in the late 1990's and into 2000, but took a debilitating toll on those individuals so tasked. With the commissioning of Keahole CT-4 and CT-5 in 2004, it was decided to split the position into two dedicated, site specific maintenance supervisor positions. The East Hawaii CT&D

supervisor has responsibility from Puna to Waimea and is responsible for 48 MW of generation, while the Keahole supervisor is responsible for 63 MW of generation, but without the long travel times that the East Hawaii group has. This would provide for better full time coordination (vice part time) with the respective craft personnel and provide a higher degree of site ownership. Additional supervisory positions are called for in the S&H section with respect to the mechanical and electrical sections. See Attachment 1, pages 10 – 11, HELCO IOC dated 4/19/05, re: Production Staffing - 2005. Since the steam plant maintenance force is required to take care of equipment that is generally older and more complex, it strains the maintenance staff to coordinate all the work needed. To continue the efforts stated through the Asset Optimization program and to progress with a Predictive Maintenance program at HELCO, it was requested to fill an additional position, referred to as the Maintenance Engineer. See Attachment 1, pages 12 – 14, HELCO IOC dated 10/3/05, re: Predictive Maintenance (PdM) – HELCO Production. This request led to the second Resource Planner position, which was filled in July 2006.

Confidential Information Deleted
Pursuant to Protective Order No. 22593.

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CA-IR-74

Ref: HELCO T-5, page 74, Lines 13-19.

- a. Please provide copies of all studies, reports, analyses, projections and other information relied upon in making the statement, "Due to high overtime rates experienced in 2004 and 2005, it was determined that the following additional positions were needed and would result in a more cost-effective way to perform the necessary maintenance work: (list of positions omitted)."
- b. How much of the "high overtime" in 2004 and 2005 is intended to be avoided upon filling these new positions in 2006? Provide copies of all documentation to support your response.

HELCO Response:

- a. HELCO T-5, page 74, Lines 13-19 states:

"b. Due to high overtime rates experienced in 2004 and 2005, it was determined that the following additional positions were needed and would result in a more cost-effective way to perform the necessary maintenance work: (1) machinist/mechanic for steam and hydro ("S&H") group; (2) diesel mechanic for CT&D (East) group; (3) Instrument technician for CT&D (East) group; and (4) Instrument technician for S&H group."

To clarify and update the above referenced statement, the Company provides the following:

- (1) Machinist/Mechanic for Kanoelehua S&HU group - filled 03/13/2006
- (2) Diesel Mechanic for Kanoelehua CT&D (East) group - both a retirement and a replacement occurred in 2006 and thus is not reflected as a change in HELCO-542
- (3) Instrument Technician for Kanoelehua CT&D (East) group - filled 04/25/2005
- (4) Instrument Technician for Kanoelehua S&H group - filled 10/10/2005

In addition, the Company added a Diesel Mechanic position for the Keahole CT&D group which has yet to be filled.

The two remaining vacancies in HELCO's Maintenance Division are the Kanoelehua CT&D Maintenance Supervisor position which became vacant in 2005 and the Keahole CT&D Maintenance Supervisor which was budgeted for in 2005 but not yet filled. As explained on lines 4-12 of page 74, there is a need for two CT&D Maintenance Supervisors – one in Kanoelehua and one in Keahole – because of the five to six hour round trip travel time between Hilo (Kanoelehua) and Keahole.

With respect to support for making the statement on lines 13-19 on page 74, see Attachment 6 of the HELCO T-5 response to CA-IR-1, and HELCO's responses to CA-IR-48, CA-IR-67 and CA-IR-73.

- b. Available information was provided in HELCO's response to CA-IR-71 and HELCO T-5, page 75, lines 4 to 16.

CA-IR-75

Ref: HELCO T-5, page 78, line 3; HELCO-535 and HELCO-542.

- a. Please itemize the positions by Site that were assumed to be filled at the beginning of 2006 that were, in fact, not filled at that time.
- b. Provide a listing of all of the authorized, but unfilled positions by Site (using the format of HELCO 535/542 that existed on January 1, 2003, January 1, 2004 and January 1, 2005).
- c. Explain whether HELCO has historically managed to consistently maintain full employment within every single authorized position, in spite of retirements, resignations and unanticipated terminations.

HELCO Response:

- a. The positions that were assumed to be filled that are not filled are those reflected in the '05 vs. '06 columns on HELCO-535 and HELCO-542, since the Year End 2006 Test Year was also assumed to be the year beginning 2006 Test Year status. The information in the exhibits has been reformatted in Attachments 1 and 2 to show Year End 2005 Actual, 2006 Test Year, '05 Year End vs. '06 Change, 4/30/06 Year-to-Date, and 7/31/06 Year-to-Date columns have been added.
- b. Please refer to HELCO's response to CA-IR-9.
- c. HELCO has not consistently maintained "full employment." HELCO recognizes that it is difficult to maintain "full employment" when there are these types of departures (e.g., retirement, resignation, termination), which are sometimes called structural vacancies. However, HELCO has done some hiring in anticipation of these structural vacancies. To make up for the lag in filling vacancies, HELCO also has brought in contract workers for outside services-temporary hire, and agency temporaries. For example, this can be seen in HGX where a outside services-temporary hire worker was brought in during 2005 to current

to fill in for an individual on long term medical leave finalizing in retirement.

Structural vacancies do not necessarily result in reduced labor expense. Vacancies may be made up for through additional overtime and more outside services-temporary hire work.

See Attachment 3, which is an updated HELCO-WP-510, page 5.

Hawaii Electric Light Company, Inc.
 2006 TEST YEAR

OTHER PRODUCTION
 OPERATIONS - EMPLOYEE COUNT

<u>Site/Position</u>	<u>YE 2005 Actual</u>	<u>2006 Test Year</u>	<u>'05 vs '06 Change</u>	<u>30-Apr-06 Year-to-Date</u>	<u>31-Jul-06 Year-to-Date</u>
<u>Operations</u>					
Manager	1	1	0	1	1
Maint Supt	1	1	0	1	1
Oper Supt	1	1	0	1	1
Oper Asst Supt	2	2	0	2	2
Shift Superv	5	5	0	5	5
Purch Pwr Admin	1	1	0	1	1
Prod Dept Admin	1	1	0	1	1
Stat Clerk	1	1	0	1	1
	<u>13</u>	<u>13</u>	<u>0</u>	<u>13</u>	<u>13</u>
<u>Technical Services</u>					
Tech Supt	1	0	-1	0	0
Staff Engineer	1	1	0	1	1
Environ Coor	1	1	0	1	1
Res Plann	1	2	1	1	1
	<u>4</u>	<u>4</u>	<u>0</u>	<u>3</u>	<u>3</u>
<u>Keahole</u>					
Pwr Plant Supv	2	2	0	2	2
Operators	6	6	0	6	5
	<u>8</u>	<u>8</u>	<u>0</u>	<u>8</u>	<u>7</u>
<u>Hill</u>					
System Oper	5	5	0	5	5
Control Oper	5	5	0	5	5
Sr Blr Oper	5	5	0	5	5
Blr Oper	4	6	2	3	3
CT3 Oper	2	2	0	2	2
	<u>21</u>	<u>23</u>	<u>2</u>	<u>20</u>	<u>20</u>
<u>Puna</u>					
Control Oper	5	5	0	5	5
Blr Oper	4	4	0	4	4
Oper Trainee	3	1	-2	5	5
	<u>12</u>	<u>10</u>	<u>-2</u>	<u>14</u>	<u>14</u>
<u>Shipman</u>					
Control Oper	0	3	3	3	3
Blr Oper	0	6	6	4	5
	<u>0</u>	<u>9</u>	<u>9</u>	<u>7</u>	<u>8</u>
Total Operations	<u>58</u>	<u>67</u>	<u>9</u>	<u>65</u>	<u>65 to ATT 2</u>

Hawaii Electric Light Company, Inc.
 2006 TEST YEAR

OTHER PRODUCTION
MAINTENANCE - EMPLOYEE COUNT

<u>Site/Position</u>	<u>YE 2005</u> <u>Actual</u>	<u>2006</u> <u>Test Year</u>	<u>'05 vs '06</u> <u>Change</u>	<u>30-Apr-06</u> <u>Year-to-Date</u>	<u>31-Jul-06</u> <u>Year-to-Date</u>
<u>Keahole CT&D</u>					
Maint Superv	0	1	1	0	0
Crew	6	7	1	6	6
	<u>6</u>	<u>8</u>	<u>2</u>	<u>6</u>	<u>6</u>
<u>Kanoelehua CT&D</u>					
Maint Superv	0	1	1	0	1
Crew	7	7	0	7	6
	<u>7</u>	<u>8</u>	<u>1</u>	<u>7</u>	<u>7</u>
<u>Kanoelehua ST&Hy</u>					
Maint Superv	1	1	0	1	1
Crew	16	17	1	17	17
	<u>17</u>	<u>18</u>	<u>1</u>	<u>18</u>	<u>18</u>
Total Maintenance	<u>30</u>	<u>34</u>	<u>4</u>	<u>31</u>	<u>31</u>
Total Operations	58	67	9	65	65 fr ATT 1
Total O&M	<u>88</u>	<u>101</u>	<u>13</u>	<u>96</u>	<u>96</u>

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2006 YearTotal
EE 108 WorkComp	3,204	3,204	3,204	3,204	3,204	3,204	3,204	3,204	3,204	3,204	3,204	3,408	38,654
EE 150 Overtime	199,289	196,822	193,481	188,850	188,655	199,544	196,655	188,956	197,100	201,611	197,133	199,692	2,347,994
EE 150 Regular Time	478,564	472,642	464,619	453,497	453,029	479,178	472,733	453,751	473,307	484,140	473,387	479,534	5,638,380
EE 503 O/S-Temp	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Budget	681,057	672,668	661,304	645,552	644,888	681,926	672,798	645,912	673,611	688,954	673,724	682,634	8,025,028

	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual
EE 108 WorkComp	0	0	0	0	0	0	0	0	0	0	0	0	0
EE 150 Overtime	192,720	315,283	229,769	178,111	204,486	123,841	204,576	202,551	197,100	201,611	197,133	199,692	19,428
EE 150 Regular Time	450,635	284,916	472,016	438,429	407,968	430,060	445,126	427,252	473,307	484,140	473,387	479,534	5,266,770
EE 503 O/S-Temp	37,663	15,120	91,398	(24,678)	30,581	109,185	20,000	0	0	0	0	0	279,269
Total Actual + Update	681,018	615,319	793,183	591,862	643,035	663,086	672,906	633,007	673,611	688,954	673,724	682,634	8,012,339

	2006 Variance
EE 108 WorkComp	(3,204)
EE 150 Labor Cost	(34,497)
EE 503 O/S-Temp	37,663
Total Variance	(39)

Assumptions:

1. Workers Comp: aside from actuals recorded in Jan through March being under budget, the remaining months will be assumed not change from the original budget.
2. Overtime: includes an increase through Aug due to the hiring and training of 5-7 operator trainees mainly for Shipman. All training is instructed by the Asst Supt (C Yamamoto) and a Shift Supervisor (NKramer). Since the Asst Supt is currently training the operator trainees hired in the last two months, 100% of Shift Supervisor training time will be on overtime, as well as the need to fill in of the vacated shifts while training is occurring. Until the training is complete and the trainees move up through the line of progression ("LOP"), all shifts at Shipman will continue to be done on overtime. It is expected that the overtime will be back to budgetary amounts by the end of August when training is complete. Further, anything over 10 shifts at Shipman will be performed on overtime. For the maintenance group, the GH and GX groups will have to double up with each of their new mechanic positions until that person is oriented.
3. Regular time: for similar reasons listed above, regular time is expected to continue to be under budget due to vacancies, and should be back in line with budget by August.
4. O/S-Temp: we currently have 3 temporary helpers in the maintenance group. This will continue until the vacant mechanic/supervisor positions are filled, and is expected to taper off in June/July. Nothing was budgeted for 2006.

CA-IR-76

Ref: HELCO T-5, page 76, line 20.

According to the testimony, "Backlog is a general term used to identify work that requires an outage and that is held in abeyance until it can be scheduled as an upcoming MO or PO." Please provide the following information:

- a. Describe each statistical and financial measure of the amount of "Backlog" that is tracked by HELCO production maintenance department management personnel.
- b. Provide complete copies of comparative statistic and financial "backlog" data for HELCO production maintenance as of 12/31/2003, 12/31/2004 and at 12/31/2005.
- c. Explain and quantify whether the amount of "backlog" work was increasing, stable or declining, based upon the data provided in your response to part (b) of this information request.
- d. Identify and describe the optimal balance that is sought between backlog work, staffing levels, overtime levels and production asset reliability.
- e. Explain how anticipated increased staffing is expected to impact "backlog" work as of 12/31/2006 and 12/31/2007, if full staffing at test year levels is achieved by mid-year.

HELCO Response:

- a. "Backlog" statistics are not tracked and/or available in a useable format for analysis purposes. As explained in HELCO T-5, page 76, and in HELCO T-5, CA-IR-1 response e, there are many factors that contribute to the amount of work (maintenance) that is identified, categorized, prioritized and planned. "Backlog" is a general term used to identify work that is held in abeyance until an opportunity arises to perform the work. Examples may include repairs that require a unit shutdown, but not an immediate threat to safety, environmental compliance or unit reliability, repairs awaiting materials and/or parts, labor resource availability, infrastructure repairs not directly impacting unit availability and/or system reliability, etc. The process to integrate backlog items into the maintenance practices is discussed in HELCO T-5, pages 43 and 44 in terms of PO, MO and FO.

In summary, backlog items exist for each unit and are managed depending on unit and resource availability, and type of outage. Refer to response to CA-IR-52 for further discussion on tracking, and reports and other documents used in the process.

- b. Not applicable.
- c. Not applicable.
- d. Please refer to HELCO T-5 response to CA-IR-1, e.
- e. Please refer to HELCO T-5 response to CA-IR-1, e.

CA-IR-77

Ref: HELCO-544 Outside Services – Production Maintenance Material 135.5% increase over 2005.

- a. Please provide a complete copy of all analyses for the “differences in the scope of normal and recurring work forecasted in the 2006 test year vs. 2005 actual material expenditures,” as referenced in the “Reason” column.
- b. What specific work is to be done at each [identified] generating unit/station in 2006 that was not done in 2005, that contributes to the 135.5% projected increase in spending?
- c. Please provide a monthly breakdown of the projected 2006 materials expense by RA, indicating the major individual items included in the estimated amounts for each month.
- d. Please provide a monthly breakdown of the actual 2006 to-date materials expense by RA.
- e. Explain the known causes of variances revealed by your response to parts (c) and (d) of this information request.

HELCO Response:

The tabulated data provided in HELCO-544 was incorrectly based on a report that was generated on 12/23/05. A budget recycle occurred in late January 2006 and therefore the final rate case information is different from the report incorrectly used. A CD of the data files used for the corrected HELCO-544 (Attachment 1) was submitted to the Consumer Advocate and the Commission on 5/9/2006. Corrections were made to each column listed in Attachment 1. The “Total” amounts remain unchanged.

The title of Column B has been revised to clarify that the amounts reflect the 2006 budget amounts, and not “test year estimates.” The differences between the budget amounts and the 2006 test year estimates are based on the budget adjustments and normalization adjustments identified in HELCO T-5 on pages 52-56 (Other Production non-labor budget adjustments) and 58-59 (Other Production non-labor normalization adjustments). These adjustments were made at

the NARUC account level, and not at the activity level. In addition, HELCO has identified other adjustments to the test year non-labor estimates in other IR responses.

The revised amounts on Attachment 1 explains the (revised) proposed 56.4% increase in “material” cost in 2006 over 2005 at line 1 as, an increase that is due to “CT-2 major field inspection, CT-5 hot section, Hill 6 major overhaul and to differences in the scope of normal and recurring work forecasted in the 2006 test year vs. 2005 actual material expenditures.” As shown on HELCO-532, the Company made a number of budget adjustments to derive its test year estimate for other production O&M expenses. They included adjusting out \$1,405,000 for the CT-5 hot section and adding in \$845,000 for a hot section at CT-4.

- a. As stated in the response to CA-IR-2, (HELCO T-5), page 1, the budgeted non-labor direct expense for the Production Maintenance block of accounts is provided in HELCO-WP-101(G), pages 710 to 744. It is important to note that the non-labor materials are budgeted as projects and non-projects, for both Operations and Maintenance blocks of accounts. Normal and recurring Planned Outages described in HELCO T-5, page 43 are budgeted as projects. This is distinguished from non-projects which capture the balance of O&M non-labor direct expenses. Attachment 3 breaks down the maintenance direct non-labor materials totals by RA for June 30, 2006 year-to-date recorded amounts and 2006 budget amounts (before budget and normalization adjustments).
- b. As discussed above, the corrected increase in “material” cost in 2006 over 2005 is 56.4%. As explained in HELCO T-5, HELCO has a normalized overhaul schedule for the project related work of each generating unit in 2006. The percentage increase is mainly due to materials needed for the CT-2 major field inspection, CT-5 hot section, and Hill 6 major overhaul work (see the response to CA-IR-2, Attachment 1B, pages 4, 9 and 10). Similar

project work was not done in 2005. In addition, as discussed in response to CA-IR-78, historical trending is mainly used to forecast non-project work. Non-project work relates to materials that the Company determines it needs only after it has inspected, opened, or otherwise accessed the equipment it is working on. This is often discovered during an overhaul, forced outage (“FO”) or maintenance outage (“MO”). Once the new work activities are defined, resources are redirected to support the overhaul (or other FO or MO) to ensure continued reliable and efficient operation after the overhaul is completed. Specific work that has been completed and is scheduled to be done at each generating unit/station in 2006 can be seen on Attachment 2 (2006 Overhaul Schedule Rev.#5), and as discussed in HELCO T-5, pages 42 to 75 and in the responses to CA-IR-56, 66 and 72.

- c. The response to CA-IR-2, Attachment 1A provides a monthly breakdown of the budgeted production O&M projects. Attachment 3 provides a breakdown of the projected 2006 materials expense by RA. Monthly breakdowns of non-project materials expenses are not readily available.
- d. Attachment 3 provides a breakdown of the actual June 30, 2006 year-to-date materials expense by RA. Monthly breakdowns are not readily available. As explained in the response to subpart e. below, the Company has rescheduled a number of its overhauls for later in the year and thus expects to incur the associated expenses for this work at the end of 2006.
- e. The causes of variances revealed by responses to parts c. and d. of this information request relate directly to changes seen in the current overhaul schedule. Attachment 2 is the 2006 Overhaul Schedule Revision #5, dated July 25, 2006. FO’s and MO’s are listed in detail, and is one reason for shifts in scheduled Planned Outages from what was originally

budgeted. This causes the timing variances for both projects and non-projects. The real variances are seen in the shift of dollars, for example, a hot section was budgeted for CT-5, but it was later determined that CT-4 required a hot section instead as shown in HELCO-WP-510, page 2. See HELCO T-5, page 53, pages 55-56; HELCO-532. Further, the timing variance, mainly due to the rescheduling of overhauls to later in the year, is expected to be caught up when the overhauls are completed.

Hawaii Electric Light Company, Inc.
2006 TEST YEAR

OTHER PRODUCTION MAINTENANCE NON-LABOR EXPENSE
2005 ACTUAL VS. 2006 BUDGET
(\$ Thousands)

	(A)	(B)	(C)	(D)	Reason
<u>EXPENSE</u>	<u>2005 ACTUAL</u>	<u>2006 BUDGET</u>	<u>CHANGE</u>	<u>%</u>	
1 Material	\$ 3,189	\$ 4,986	\$ 1,798	56.4	Increase in non-labor material expenditure is mainly due to CT-2 major field inspection, CT-5 hot section, Hill 6 major overhaul and to differences between the scope of normal and recurring work forecasted in the 2006 test year vs. 2005 actual material expenditures, which reflects all material purchases including unforecasted material purchases resulting from unanticipated repairs and/or unscheduled outages. (In its budget adjustments, HELCO replaced the CT-5 hot section with a hot section for CT-4.) When units are shut down for maintenance and unforecasted repairs are required, resources are redirected to support the repairs to ensure reliable and efficient operation. HELCO-526 and HELCO-527 illustrate the differences between 2005 actual and 2006 test year from a unit outage perspective.
2 Outside Svcs	\$ 3,813	\$ 5,207	\$ 1,395	36.6	Increase in non-labor outside services expenditure is mainly due to the CT-2 major field inspection and the CT-4 hot section planned for 2006.
3 Transportation	\$ 194	\$ 224	\$ 29	15.1	Increase is mainly attributed to the higher 2006 budgeted cost for transporting and/or expediting shipment of materials and equipment to support higher levels of maintenance and repairs. This is mainly due to the 14 shift operation of Shipman Plant.
4 Intercompany Charges	\$ 127	\$ 126	\$ (2)	(1.2)	Negligible difference.
5 Labor Related On-Cost	\$ 824	\$ 1,322	\$ 497	60.4	Labor-related on-cost – Non-labor on-cost is comprised of Energy Delivery on-cost, Power Supply on-cost, Corporate Administration on-cost, Employee Benefit on-cost, and Payroll Taxes on-cost. The increase in non-labor on-cost expenses is primarily due to the increase in staffing levels in maintenance. For further discussion regarding on-cost, see Mr. Paul Fujioka at HELCO T-9.
6 Reclassification of On-cost	\$ (793)	\$ (1,386)	\$ (592)	74.7	
7 Other	\$ 395	\$ 13	\$ (382)	(96.6)	Decrease is due to a 2004 completed capital project that was reclassified to O&M based on a change in final scope. The journal entry to correct the cost occurred in early 2005.
8 Adj & Normalizations	\$ -	\$ (268)	\$ (268)		Adjustments and normalizations were covered earlier in my testimony. (See HELCO-532 and HELCO-533.)
9 TOTAL	<u>\$ 7,749</u>	<u>\$ 10,225</u>	<u>\$ 2,475</u>	<u>31.9</u>	

Note: Numbers do not add exactly due to rounding.

HELCO
2006 OVERHAUL SCHEDULE
Revision #5 7/25/06

UNIT	Date	WEEKS	DESCRIPTION
Shipman 3	Dec 30-Jan 3	5 days	F.O., Ignitor problems
Shipman 3	Jan 8 - 11	4 days	F.O., tube leak
HEP ST	Jan 9 - 10	2 days	M.O. - vibration problem
HEP ST	Jan 10 - 18	1	F.O. - hydraulic governor repair
Shipman 3	Jan 18 - 22	5 days	F.O. - tube leak
HEP CT1	Jan 20 - 26	6 days	M.O. Hot section, new combustor
Shipman 4	Jan 28 - Feb 1	5 days	F.O., tube leak
HEP CT1	Feb 3 - 6	4 days	F.O., made available for emergencies
Shipman 3	Feb 8 - 9	2 days	F.O. Turbine Throttle Valve Leak
Hill 5	Feb 8 - 13	5 days	M.O., boiler wash/ air ejector repair
Hill 6	Feb 15 - 25	11 days	M.O. Turbine bearing inspection, sootblower
Puna Steam	Feb 28 - Mar 4	5 days	M.O., boiler wash, misc. offline repairs
Shipman 3	Mar 2 - 4	3 days	F.O. Tube Leak
HEP CT1	Mar 14 - 16	3 days	M.O. Install Lease Engine
HEP CT2	Mar 20 - 23	4 days	M. O. HRSG Leak Repair
Diesel 15	Mar 27 - 30	4 days	M.O. Radiator repair
CT2	Apr 3 - 7	5 days	M.O. Inspection, CEMS replacement
Diesel 16	Apr 4 - 6	3 days	M.O. Turbo charger replacement
Hill 6	Apr 4 - 6	3 days	F.O. Tube Leak Repair
Hill 6	Apr 7 - 9	3 days	F.O. Floor Tube Leak Repair
Shipman 4	Apr 14 - 22	8 days	M.O. CD pump and BFP pump repairs
PGV	Apr 24 - 30	1	Semi-annual maintenance
Shipman 4	Apr 28 - 30	3 days	F.O. Boiler Tube Leak Repair
CT3	Apr 27 - May 4	1	F.O. Excitation System Ground Repaired
Hill Unit No. 6	May 8 - May 28	3	Boiler Wash & Inspection
Shipman 3	May 19 - 24	6 days	F.O. Boiler Tube Leak Repair
HEP Steam Turbine	May 20 - 23	3 days	F.O. Steam Turbine Coupling Repair
Kanoelehua 15, 16	May 22 - Jun 3	12 days	F.O., Battery Bank Repair
Kanoelehua 17	May 22 - Jun 18	4	F.O. Battery Bank/Charging System
Shipman 4	May 24 - Jun 7	12 days	F.O. Boiler Tube Leak Repair
HEP CT2	May 21 - 25	5 days	F.O. HRSG Tube Leak Repair, Trb. Fan
Puna Steam	May 29 - Jun 2	5 days	M.O., Miscellaneous offline repairs, hopper
Hill 5	Jun 7 - 9	3 days	F.O. Turbine Vibration
Hill 6	Jun 7 - 9	3 days	F.O. Tube Leak Repairs
Shipman 3	Jun 13 - 15	3 days	F.O. Tube Leak Repairs
Keahole CT-4	Jun 15 - 21	1	Hot Section, General Inspection
HEP CT-3	Jun 25 - 26	2 days	F.O. HRSG leak and bypass valve repairs
Keahole CT-5	Jun 27 - 30	4 days	General Inspection
Shipman 3	Jul 3 - 5	3 days	F.O. Tube Leak Repairs
Hill Unit No. 6	Jul 8 - Aug 6	4	Boiler Chemical Clean, Boiler Assessment, Condenser Relube, H2 Modifications
Shipman 4	Jul 13-16	4 days	F.O. Tube Leak Repair
HEP CT1, CT2	Aug 7-15	8 days	CT1 Reinstall, CT2 Annual (Hot Section)
Puna Steam	Aug 16-19	4 days	Boiler/APH/Hopper Wash
Puna CT-3	Aug 21-Sep 3	2	General Inspection
Kanoelehua CT-1	Sep 4 -17	2	Gen. Insp., Low Smoke Nozzles & Ignitors
Shipman 3	Sep 4 - Oct 1	4	Boiler Insp., BFW Pumps
Keahole CT-2	Sep 18 - Oct 28	8	Governor Control, MFI, Generator Inspection
Shipman 4	Oct 2-29	4	Boiler Insp, BFW Pumps, Exciter
PGV	Oct 30 - Nov 5	1	Maintenance
Puna Steam	Nov 6-Dec10	5	Boiler Inspection, Turbine Inspection
Hill 5	Dec 11-17	1	Cable Replacement



Norman Hebanian

Hawaii Electric Light Company, Inc.
2006 TEST YEAR

OTHER PRODUCTION MAINTENANCE MATERIALS EXPENSE
2005 ACTUAL VS. 2006 BUDGET VS. JUNE 30, 2006 ACTUAL YEAR-TO-DATE

			Data			
GL_CODE	ee	ra	Sum of 2005rec	Sum of 2006fct	Sum of 6/30/06rec	
Production Maintenance (B31)	201	HDC	24,725	-	-	
		HDW	713	-	-	
		HEA	-	132,644	-	
		HGA	30	110	-	
		HGH	64,310	18,430	66,593	
		HGK	1,229,169	1,950,980	566,064	
		HGM	898,425	1,384,270	368,557	
		HGP	54,521	11,720	96,773	
		HGT	994	1,380	7,758	
		HGW	414	-	-	
		HGX	730,737	793,810	172,982	
		HLA	42,772	62,800	16,615	
		HWA	15,144	-	1,530	
	201 Total			3,061,953	4,356,144	1,296,872
	205	HDC	609	-	58	
		HGA	961	930	1,884	
		HGH	2,024	1,410	1,625	
		HGK	52,447	40,090	20,647	
		HGM	39,387	53,694	16,745	
		HGP	1,142	700	1,057	
HGT		395	-	479		
HGW		872	-	-		
HGX		28,387	17,100	19,895		
HWA	444	-	778			
205 Total			126,668	113,924	63,167	
401	HEA	-	15,718	-		
	HGA	-	13	-		
	HGH	-	2,184	-		
	HGK	-	231,191	-		
	HGM	-	164,036	-		
	HGP	-	1,389	-		
	HGT	-	164	-		
	HGW	-	-	-		
HGX	-	94,067	-			
HLA	-	7,442	-			
401 Total			-	516,203	-	
B31 Total			3,188,621	4,986,271	1,360,039	
Grand Total			3,188,621	4,986,271	1,360,039	

CA-IR-78

Ref: CA-IR-2 (T-5) Attachment 1, page 5 of 5, Non-project, Direct Non-labor Inputs by Expense Element.

The amounts input for the test year forecast by expense element appear to be derived from a series of spreadsheets summarizing the actual comparable amounts for prior years 1999 through 2004, with a computed average of such costs for the years 2001 through 2004, utilizing either the calculated average, an escalated 2004 value or a separately calculated input amount. Please provide the following information:

- a. Confirm or correct the description provided above regarding the procedures used to derive estimated test year values.
- b. Provide an update to the Attachment 2A, pages 9-21, EE=201 materials, spreadsheet in Excel format, with 2 columns added after "FY04 actual" that contain comparable 2005 actual data and half-year January-June 2006 actual data.
- c. Provide an update to the Attachment 2B, pages 6-18, EE=205 procard materials, spreadsheet in Excel format, with 2 columns added after "FY04 actual" that contain comparable 2005 actual data and half-year January-June 2006 actual data.
- d. Provide an update to the Attachment 2C, page 6, EE=900 financial entries, spreadsheet in Excel format, with 2 columns added after "FY04 actual" that contain comparable 2005 actual data and half-year January-June 2006 actual data.
- e. Explain each individual entry in excess of \$100,000, as listed in your response to part (d) of this information request, for all years from 1999 through 2006.
- f. Provide an update to the Attachment 2D, pages 9-29, EE=501 outside services, spreadsheet in Excel format, with 2 columns added after "FY04 actual" that contain comparable 2005 actual data and half-year January-June 2006 actual data.
- g. Provide an update to the Attachment 2F, pages 4-7, EE=508 environmental, spreadsheet in Excel format, with 2 columns added after "FY04 actual" that contain comparable 2005 actual data and half-year January-June 2006 actual data.
- h. Provide an update to the Attachment 2H, page 1, Lalamilo Wind Farm spreadsheet in Excel format, with 2 columns added after "FY04 actual" that contain comparable 2005 actual data and half-year January-June 2006 actual data.

HELCO Response:

- a. The description provided above regarding the procedures used to derive estimated test year

values is better described as follows: The non-project amounts input for the 2006 budget (before adjustments and normalizations) by expense element are derived from a series of spreadsheets summarizing the actual comparable amounts for prior years 1999 through 2004, with a computed average of such costs for the years 2001 through 2004 (or less, such as 2003 and 2004), utilizing either the calculated average, or a separately calculated input amount.

- b. The information is not available in the form requested for 2005 and year to date June 2006. Attachment 1 is provided with costs by RA versus the requested detailed update to Attachment 2A of HELCO T-5 CA-IR-2. Test year reports are prepared by HECO for the entire company of HELCO, and not by individual department. Further, the column titled "Operating Budget 2006" represents forecasted amounts before adjustments and normalizations.
- c. Refer to Attachment 1, and response b.
- d. Refer to Attachment 1 and response b.
- e. Referring to Attachment 1, and response b, explanations of each individual entry in excess of \$100,000, as listed in response to part (d) of this information request, for all years from 1999 through 2006 are as follows:
 - 1. 1999 amount of \$692,248 is for the September 1999 Keahole legal adjustment, expensed in 1999 from capital.
 - 2. 2000 amount of \$250,000 is the September 2000 accrual for insurance deductible for CT-2 storm damage.
 - 3. 2001 amount of \$109,200 is the December 2001 CT-3 combustor purchase.
 - 4. 2002 amount of \$(599,985) and 2003 amount of \$(1,029,451) is for the December 2002

CT-3 insurance damage reimbursement and the April 1999 adjustment overage for CEMS in 1998.

5. 2004 amount of \$264,575 is charges for the Pier 3 oil spill.
 6. 2005 amount of \$261,384 is charges for the Pier 3 oil spill
 7. 2005 amount of \$339,763 is the Kanoelehua switchgear project which was reclassified to O&M from capital due to a change in scope of the project.
- f. Refer to Attachment 1, and response b.
 - g. Refer to Attachment 1, and response b.
 - h. Refer to Attachment 1, and response b.

Hawaii Electric Light Company Inc.

2006 TEST YEAR
Non-project Non-Labor by Expense Element

EE	RA	Recorded								Operating Budget 2006
		1999	2000	2001	2002	2003	2004	2005	2006YTD	
201	HGA	18,699	2,470	2,245	5,416	2,760	2,989	32,806	1,217	3,110
	HGC	-	97	2,312	3,400	84	26,174	162,427	16,956	27,280
	HGH	99,814	146,991	146,353	166,322	104,057	169,629	201,373	169,889	246,000
	HGK	574,444	686,538	275,472	300,921	318,890	565,270	344,583	168,622	508,420
	HGM	682,767	751,267	516,943	600,515	824,631	882,453	408,660	291,343	762,810
	HGP	140,403	179,925	123,933	167,379	108,435	159,528	141,002	184,153	222,750
	HGT	-	-	-	235	6,123	1,668	999	7,758	2,020
	HGW	44,099	46,086	8,605	43,130	56,978	36,849	35,734	52,443	72,610
	HGX	-	-	-	-	106,930	723,167	178,401	195,857	753,810
201 Total		1,560,227	1,813,372	1,075,863	1,287,317	1,528,888	2,567,727	1,505,983	1,088,239	2,598,810
205	HGA	2,943	7,604	17,782	24,698	22,760	29,425	28,689	14,445	23,400
	HGC	-	432	850	908	444	2,607	5,428	1,981	1,260
	HGH	9,122	11,436	14,268	12,517	8,817	13,443	13,564	8,430	12,420
	HGK	13,015	16,970	10,442	16,541	14,773	40,550	52,170	22,456	40,600
	HGM	40,001	46,074	47,835	64,217	61,512	49,158	32,528	18,542	54,664
	HGP	1,778	5,075	5,100	4,415	5,563	5,030	3,449	2,629	4,570
	HGT	-	-	-	399	4,934	1,701	4,145	1,477	1,550
	HGW	2,177	2,306	1,043	2,570	2,335	367	1,864	1,716	1,600
	HGX	-	-	-	-	8,723	17,618	21,076	22,538	17,770
205 Total		69,035	89,897	97,320	126,264	129,861	159,899	162,911	94,214	157,834
501	HGA	251,353	82,543	123,875	100,397	106,139	238,033	99,367	33,899	99,570
	HGC	-	-	42	3,106	2,414	5,006	334,789	50,979	6,700
	HGH	64,070	79,965	163,926	111,775	182,277	348,901	519,797	250,211	120,430
	HGK	119,975	617,373	(387,352)	295,543	111,230	235,553	232,124	222,442	270,660
	HGM	338,531	1,159,081	535,994	3,688,463	2,450,817	2,013,845	877,809	570,878	1,753,310
	HGP	74,668	(171,917)	325	223,693	118,151	117,931	417,963	74,635	120,050
	HGT	-	-	-	302	43,731	64,686	49,153	17,299	21,620
	HGW	66,828	53,258	41,100	118,077	203,344	182,661	188,174	110,066	192,190
	HGX	-	-	-	-	235,742	209,121	63,416	188,162	256,930
501 Total		915,425	1,820,303	477,910	4,541,356	3,453,845	3,415,737	2,782,593	1,518,571	2,841,460
508	HGA	2,795	80,323	54,469	8,439	24,678	7,053	15,605	13,212	25,800
	HGC	-	-	-	-	-	79,351	21,750	(5,401)	3,040
	HGH	9,914	205,594	199,129	609	373,138	59,537	209,931	94,399	205,579
	HGK	1,160	49,627	58,712	4,678	56,284	(16,366)	46,025	10,406	22,217
	HGM	-	2,605	15,492	94,666	76,269	15,950	(1,013)	3,000	52,690
	HGP	4,020	102,974	104,226	33,746	174,727	2,304	92,823	95,125	98,824
	HGT	-	-	-	-	15	-	1,648	789	-
	HGW	9,181	50,657	39,157	1,854	31,191	15,136	17,003	30,785	10,851
	HGX	-	-	-	-	1,216	187	875	2,656	320
508 Total		27,070	491,780	471,186	143,993	737,518	163,152	404,646	244,972	419,321
900	HGA	692,248	80	422	394	469	264,575	261,384	359	600
	HGH	-	-	-	-	-	-	81	-	-
	HGK	389	250,000	-	-	132	1,456	50,261	-	-
	HGM	-	-	109,200	(599,985)	(1,029,451)	48,147	3,310	-	-
	HGP	15,664	-	-	-	-	-	-	-	-
	HGX	-	-	-	-	4,872	2,912	339,763	-	-
900 Total		708,301	250,080	109,622	(599,591)	(1,023,978)	317,090	654,799	359	600
Grand Total		3,280,058	4,465,431	2,231,902	5,499,338	4,826,134	6,623,605	5,510,932	2,946,354	6,018,025

Hawaii Electric Light Company Inc.										
2006 TEST YEAR										
Non-project Non-Labor by Expense Element - Lalamilo										
Recorded										Operating
EE	RA	1999	2000	2001	2002	2003	2004	2005	2006YTD	Budget 2006
150	HLA	-	309	-	-	-	-	-	-	-
150 Total		-	309	-	-	-	-	-	-	-
155	HLA	-	(77)	-	-	-	-	-	-	-
155 Total		-	(77)	-	-	-	-	-	-	-
201	HLA	59,405	102,168	88,546	186,209	46,686	43,960	56,673	22,627	90,800
201 Total		59,405	102,168	88,546	186,209	46,686	43,960	56,673	22,627	90,800
301	HLA	1,411	(5,098)	1,407	5,061	4,371	4,430	5,795	2,772	3,900
301 Total		1,411	(5,098)	1,407	5,061	4,371	4,430	5,795	2,772	3,900
501	HLA	225,390	136,566	141,865	241,351	257,412	203,547	234,822	88,175	205,600
501 Total		225,390	136,566	141,865	241,351	257,412	203,547	234,822	88,175	205,600
502	HLA	-	-	-	-	-	-	1,260	-	-
502 Total		-	-	-	-	-	-	1,260	-	-
503	HLA	-	22,190	27,331	30,178	5,485	-	2,406	-	-
503 Total		-	22,190	27,331	30,178	5,485	-	2,406	-	-
508	HLA	-	-	-	-	592	-	-	-	-
508 Total		-	-	-	-	592	-	-	-	-
521	HLA	-	-	-	-	-	-	14	-	-
521 Total		-	-	-	-	-	-	14	-	-
522	HLA	94	-	-	-	-	-	-	-	-
522 Total		94	-	-	-	-	-	-	-	-
Grand Total		286,300	256,057	259,149	462,799	314,546	251,937	300,971	113,574	300,300

CA-IR-79

Ref: CA-IR-2 (T-5) Attachment 2K, CHP Budget.

Please provide the following information:

- a. Explain the intended treatment of CHP fuel and other O&M costs in the Company's filing.
- b. State whether the \$157,333 amount under the column "Fuel Costs" is included in the Company's test year projected O&M, after all adjustments and normalizations are considered.
- c. Explain how/if CHP fuel costs are treated in the Company's calculation of ERAC fuel expense.
- d. Describe the Company's accounting for such costs on its books, indicating the NARUC accounts being used.

HELCO Response:

- a. As stated in HELCO T-4, page 26, lines 6 through 12, HELCO along with HECO and MECO (collectively, the HECO Utilities) submitted an application to the Commission in Docket No. 03-0366 for approval of a Combined Heat and Power ("CHP") Program. CHP fuel consumption is not included in the estimate of fuel expense because HELCO does not foresee any installation of CHP units in the test year.
- b. The \$157,333 is part of the minus \$170,500 adjustment shown on HELCO-WP-510, page 2, line item 2. Due to the reason stated above, the entire \$157,333 plus \$13,170 of non-labor on-costs were removed.
- c. Not applicable. See response a.
- d. The Company accounts for such costs under NARUC account 554440 Mt Misc Oth Pwr Plt – Disp Gen Unit #28. This is found at the bottom of HELCO-WP-101(G), page 743 and on HELCO-WP-101(E), pages 490 and 491.

CA-IR-80

Ref: CA-IR-2 (T-5) Attachment 2I, page 2, Outside Legal PPA.

Please provide the following information regarding the \$250,000 included for outside legal services:

- a. A detailed explanation of all services anticipated.
- b. Calculations and supporting documentation for the amount being proposed.
- c. Actual comparable expenses incurred by HELCO in each of the historical years 1999 through 2005.
- d. Actual comparable expenses incurred in each month of 2006 to-date.
- e. All available information relied upon by HELCO to reach the apparent conclusion that the Company will normally incur \$250,000 annually in outside legal services in connection with PPA administration.

HELCO Response:

- a. For services anticipated in 2006, HELCO engages its outside legal counsels to provide important and expert advice on various power purchase matters. These include (1) advising and representing HELCO in negotiations with Independent Power Producers ("IPP's") for new or amended Purchase Power Agreements ("PPA's"), (2) obtaining Commission approval of PPA's and PPA amendments, and (3) advising or representing HELCO with respect to matters arising out of the administration of PPA's (such as IPP financings, consents, PPA disputes, interpretation of PPA provisions, etc.). HELCO also relies on outside legal counsel to keep abreast of Federal and State case law in other jurisdictions to help develop and substantiate HELCO's positions on contract language and administration.

Purchased power is a large and important component of HELCO's generating system. On the Big Island, IPP firm capacity (HEP and PGV) represents one-third of total firm capacity. (See Exhibit E to HECO's Comments filed September 26, 2005 on Economists

Incorporated's Second Concept Paper dated July 26, 2005 "Proposals for Implementing Renewable Portfolio Standards in Hawaii".) As stated on HELCO T-5, page 85, lines 3 to 5, "In the 2006 test year, HELCO estimates that it will purchase approximately 710.1 GWh in energy. This represents approximately 57% of the total net energy produced of 1,251.2 GWh required in the test year 2006." After the Apollo repowering is completed in 2007, it is expected that IPP generation as a percentage of total net-to-system generation will be about 64%.

As the Consumer Advocate is aware, power purchase negotiations tend to focus on a number of key issues that ultimately impact service to and costs incurred by ratepayers, such as price, form of price, PPA term, performance obligations, standards and guarantees, in-service date deadlines and milestones, and consequences for failures to meet obligations and standards. IPPs and IPP-project lenders generally seek certainty with respect to their risks and obligations, especially when their facilities will be financed on a non-recourse basis. A utility needs flexibility to adjust to changed circumstances, ideally the flexibility that it would have when it owns and operates its own units. A PPA's inherent lack of flexibility becomes magnified as the term of the contract is lengthened. (Firm capacity contracts have extended from 25 to 35 years, and as-available energy contracts have extended 20 years.) This occurs because the assumptions used in negotiating the PPA become less precise as the period being forecasted increases. To the extent that these assumptions do not accurately predict future circumstances, any inflexibility inherently caused by the legal obligation of a long-term contract or by specific contract terms based on those set of assumptions would tend to be magnified. Thus, certainty and flexibility are often competing and contradictory considerations, and initial PPA negotiations can become complicated as a result.

PPA negotiations on the Big Island are further complicated by the extent to which HELCO already relies upon purchased power, and the complications inherent in providing reliable service while integrating even more purchased energy into its system. See HELCO T-5. At the same time, HELCO intends to make every reasonable effort to integrate even more renewable energy resources into its system, and its outside counsels are participating in that effort.

If circumstances do change enough after a PPA is executed and approved to require a PPA amendment, the approval of the amendment generally will have to be negotiated not only with the IPP's owners (which may be a partnership or limited partnership), but also with the IPP's lenders (which may be a group of lenders), and possibly even with certain suppliers under long-term contracts with the IPP; all of whom may be represented by counsel.

Although PPAs are written with care and are improved upon with every new PPA that is negotiated, every PPA is subject to interpretation. The IPP will interpret the contract to its advantage, which can lead to costly disputes. Thus, outside counsel are consulted from time-to-time with respect to the administration and enforcement of existing PPAs.

- b. The calculation of the amount being proposed was prepared in early 2005 based on HELCO's six-year average (1999 to 2004) for purchased power related legal expenses. 2005 actuals were not available at that time. As shown in the table provided in response to part c. below, the average was approximately \$225,000 per year. As evidenced in HELCO T-5, purchased power legal costs are a normal and ongoing expense related to the negotiation and administration of PPAs.
- c. Actual comparable expenses incurred by HELCO in each of the historical years 1999

through 2005 are as follows:

	Activity			Total
	122	121	120	
1999	\$296,852	\$23,300	\$11,713	\$331,865
2000	\$279,850	\$650	\$0	\$280,500
2001	\$136,984	\$110	\$0	\$137,094
2002	\$206,170	\$0	\$0	\$206,170
2003	\$214,736	\$0	\$0	\$214,736
2004	\$173,387	\$5,093	\$0	\$178,480
2005	\$46,414	\$3,196	\$0	\$49,610

- d. Actual comparable expenses incurred in each month of 2006 to-date are shown below.

	Activity			Total
	122	121	120	
2006				
Jan	\$544	\$0	\$0	\$544
Feb	\$0	\$0	\$0	\$0
Mar	\$1,591	\$0	\$0	\$1,591
Apr	\$315	\$0	\$0	\$315
May	\$143	\$0	\$0	\$143
Jun	\$2,143	\$0	\$0	\$2,143
Jul	\$2,960	\$0	\$0	\$2,960
YTD Total				\$7,696

- e. As of the end of June, HELCO was negotiating with proposed project developers with respect to two proposed wind farms, a biomass facility, a biomass cogeneration facility, a geothermal expansion, and a small hydroelectric facility. See confidential information filed June 27, 2006 in Docket No. 03-0372 pursuant to Protective Order No. 22562 (June 26, 2006). In addition HELCO had received another biomass proposal, which could be revived, and has since received proposals for a concentrated solar facility and a wind farm repower project.

Given the current level of negotiations, HELCO would expect its outside legal expenses to be significantly higher through the remainder of 2006. However, at this point in time,

HELCO does not expect expenditures to approach the \$250, 000 level originally projected for 2006.

For the five-year period from 2001 through 2005, the average expense for the year for outside legal services for PPA administration, negotiation and approval was about \$157,000. This amount would represent a more normalized estimate of the on-going level of expense that HELCO would expect to incur for this activity through 2007. However, the expense level could be higher depending on the outcome of the current negotiations, and would be higher if HELCO issues an RFP under the Commission's Framework for Competitive Bidding in the near-term.

CA-IR-81

Ref: HELCO-WP-509, Production M&S Inventory.

Please provide the following information regarding production M&S inventories:

- a. A breakdown of actual per-books inventory balances at 12/31/2004, 12/31/2005 and 6/30/2006 by station/location.
- b. Explain HELCO's policy regarding the conduct of physical inventory audits to verify the existence and non-obsolescence of recorded assets.
- c. Provide a copy of the most recent physical audit report and accounting adjustment entries made in connection with such production M&S audits for each HELCO inventory location.
- d. Please update HELCO-WP-509 with actual data for all available months of 2006.

HELCO Response:

- a. HELCO does not maintain production material and supply inventory balances by station and location. The entire production material and supplies inventory is being recorded in the Ellipse system as located at Warehouse 70 (Hilo Production) since it is being managed by the Stores Division in Hilo. See Attachment 1 for production material and supply inventory balances as of 12/31/2004, 12/31/2005 and 6/30/2006.
- b. There is no official written policy regarding physical inventory audits. What occurs in the Production warehouse is four days per week, the Ellipse system generates a "Stock Take Count Run" for the warehouse storekeeper. (See Attachment 2.) Between zero and ten inventory items are listed on each "Stock Take Count Run." The warehouse storekeeper performs an actual physical count of each item, and notes the amount on the "Stock Take Count Run." This sheet is then given to the warehouse materials coordinator who enters the actual count amounts back into Ellipse. Ellipse then adjusts the dollar value assigned to the item up or down based on the difference, if any, between the actual count taken and what

was recorded in Ellipse. Ellipse makes the adjustment and HELCO relies on this dollar amount for inventory.

- c. Refer to discussion in response b, and see Attachment 2.
- d. See Attachment 3 for HELCO-WP-509 updated for actual data for available months of 2006.

HAWAII ELECTRIC LIGHT COMPANY, INC.
RATE CASE 2006 - PRODUCTION INVENTORY BY LOCATION

	<u>12/31/2004</u>	<u>12/31/2005</u>	<u>6/30/2006</u>
Hilo	1,004,029	1,006,978	1,016,533
Keahole	-	-	-
Total	<u>1,004,029</u>	<u>1,006,978</u>	<u>1,016,533</u>

Run on: 07/25/06 at: 22:04:44
 Warehouse: 70 HILO PRODUCTION
 Primary/Other Hms Stock Code
 Run on: 07/25/06 at: 22:04:44
 Page: 2
 Report: MSTR171A
 Ver: 5.2.37.001A

HAWAII ELECTRIC LIGHT CO., INC.
 STOCK TAKE COUNT SHEETS

Warehouse	Primary/Other Hms	Stock Code	Group Item Name and Descriptions/ Class Manufacturers Part Numbers and Preferences	UOI	Iss Class	Type	Owned	Consigned	New Bin Location	Code
16-B-6, D2	000400101	EC00	FUSE XTK-RJ POWHELC 50243	EA	0	6.69	0	0		
16-B-9	000399105	EC00	RECEPTACLE, WHITE LENS, STYLE 449D187G34 FOR 125V 2.5WATT LAMP WEST CUMMER 10718670 50041 1 POWHELC 50389	EA	G	59.15	11	0		
17-C-5, D2	000400226	AU00	PRESSURE GAUGE CONTROL BAILLY POWHELC 50313	EA	0	29.08	0	0		
17-C-5, D2	000400242	AU00	PRESSURE GAUGE CONTROL LOADING BAILLY 5315L-3 POWHELC 50314	EA	0	5.14	0	0		
17-C-5, D2	000400267	AU00	AIR VALVE ASSY 53705-1 BAILLY POWHELC 50315	EA	0	448.50	0	0		

mm

ITEMS COUNTED: 5
 COUNTED BY: GOC
 COUNTED DATE: 7-26-06

07/26/06 GOC

Req By: Mari Ojio at: 22:04:44
 Run On: 07/25/06
 HAWAII ELECTRIC LIGHT CO., INC.
 STOCK TAKE COUNT SHEETS
 MSRI78A
 Report: 5.2.37.061A
 Version:

Run Number 274

Primary/Other bins	Stock Code	Group Name and Descriptions/ Class Manufacturers Part Numbers and preferences	DOI	Iss Price/ Class Type	Owned SOH Cnt	Consign SOH Cnt	New Bin Location Code
17-C-7	000400309 AU00	BOLO WRTR BAILEY 191926-1 POWHEL 50318	01 99	EA 0 429.17 G	0	0	
17-C-8	000400325 AU00	BOOSTER UNIT 1-15 BAILEY 5116500-2 POWHEL 50319	01 99	EA G 481.39 G	2	0	
20-A-5	000400127 AU00	SEAT/STRM/PLNG FOR INNER VALVE BAILEY UNKNOWN POWHEL 50303	01 99	EA 0 2940.34 G	1	0	
20-A-5	000400143 AU00	CAGE/STEM/DISC FOR INNER VALVE BAILEY 7112179AC1 POWHEL 50304	01 99	EA 0 2542.00 G	1	0	
21-A-8	000409003 MS00	GLOBE VALVE 1-1/2" 5500V VOCK UNKNOWN HAYCOCK UNKNOWN POWHEL 51509	01 98 99	EA 0 156.43 G	4	0	

ITEMS COUNTED 5 | 60 | COUNTED DATE 7-26-06

Process Stock Take Counts (HAWAII ELECTRIC LIGHT CO., INC.)

File Edit Tools Help

Confirm Revert %  

Warehouse Code: 70 HILO PRODUCTION
 Authorized by: 000030966 HOKE KRIS L K

Stock Code	Description	Owned SDH	Consign SDH	Owned Qty Adj.	Consign Qty Adj.	Owned Value Adj.	Consign Value Adj.	Consignment Value Adj.	Bin Location
1	000400101 FUSE, KTK-R1	5	0	0	0	-6.88	-6.88	+0.00	
2									
3									
4									
5									
6									
7									

MSM173A
 Date Printed: 26 July 2006 05:13:07
 Elipsa Userid: khoke

Program Name: msq000.exe
 Program Description: Process Stock Take Counts (HAWAII ELECTRIC LIGHT CO., INC.)
 Version: 001A
 Revision: 163.1 \$ Date: Friday, November 26, 2004
 Module: 3001
 Product Version: 5.2.3.2
 File Version: 5.23.163.1
 Location: d:\PROGRAMS\TLM\FromMIMSOP\1623-1.2\src\
 Compiled Date: 30 November 2004 15:04
 Form Name: MSM173A

HAWAII ELECTRIC LIGHT COMPANY, INC.
RATE CASE 2006 - PRODUCTION INVENTORY
HELCO-WP-509 page 1 of 1
(updated on 7/31/06)

	PURCHASE	ISSUES	ADJUST	INVENTORY
2002				
JAN	14,165	16,032	(226)	793,639
FEB	5,643	11,920	(1,783)	785,579
MAR	17,977	4,707	(1,919)	796,930
APR	24,482	17,971	(308)	803,133
MAY	18,544	6,321	(107)	815,249
JUN	15,661	10,571	0	820,339
JUL	24,202	3,844	1,697	842,394
AUG	19,853	21,108	(273)	840,866
SEP	8,566	9,220	4,697	844,909
OCT	19,199	12,630	806	852,284
NOV	27,992	23,596	(710)	855,970
DEC	23,584	16,717	1	862,838
TOT	219,868	154,637		862,838

	PURCHASE	ISSUES	ADJUST	INVENTORY
2005				
JAN	10,604	10,984	(3)	1,003,646
FEB	7,259	8,933	(193)	1,001,779
MAR	6,660	997	1,407	1,008,849
APR	8,626	5,740	39	1,011,774
MAY	923	6,741	(1)	1,005,955
JUN	3,819	4,617	1,005	1,006,162
JUL	0	4,645	(338)	1,001,179
AUG	3,248	29,035	(176)	975,216
SEP	7,858	4,591	(1)	978,482
OCT	18,448	8,494	5,004	993,440
NOV	6,953	16,569	0	983,824
DEC	23,485	334	3	1,006,978
TOT	97,883	101,680		1,006,978

	PURCHASE	ISSUES	ADJUST	INVENTORY
2003				
JAN	10,020	5,684	(49)	867,125
FEB	2,529	4,641	(1,189)	863,824
MAR	1,317	2,193	(956)	861,992
APR	4,206	19,253	(42)	846,903
MAY	23,404	1,666	(14,703)	853,938
JUN	39,122	10,008	(63)	882,989
JUL	17,500	22,048	171	878,612
AUG	20,849	4,711	(74)	894,676
SEP	1,739	2,100	(295)	894,020
OCT	22,767	28,730	47	888,104
NOV	1,058	7,924	(6)	881,232
DEC	1,357	2,755	0	879,834
TOT	145,868	111,713		879,834

	PURCHASE	ISSUES	ADJUST	INVENTORY
2006				
JAN	2,924	3,315	0	1,006,587
FEB	14,484	14,288	291	1,007,074
MAR	15,658	7,723	19	1,015,028
APR	3,592	3,734	20	1,014,906
MAY	8,285	8,043	(58)	1,015,090
JUN	3,808	2,429	64	1,016,533
JUL	4,847	325	50	1,021,105
AUG	2,447	19,221		1,004,331
SEP	5,129	3,830		1,005,630
OCT	10,712	4,801		1,011,541
NOV	26,428	9,486		1,028,483
DEC	36,923	2,626		1,062,780
TOT	135,237	79,821		1,062,780

	PURCHASE	ISSUES	ADJUST	INVENTORY
2004				
JAN	18,913	9,305	(140)	889,302
FEB	11,584	9,761	1,425	892,550
MAR	13,834	3,187	17	903,214
APR	24,747	10,824	(1,006)	916,131
MAY	0	22,648	(126)	893,357
JUN	19,245	1,713	567	911,456
JUL	136	495	11,052	922,149
AUG	1,645	9,406	(33)	914,355
SEP	2,399	3,068	0	913,686
OCT	2,976	1,107	(890)	914,665
NOV	45,902	2,402	1	958,166
DEC	50,361	4,917	419	1,004,029
TOT	191,742	78,833		1,004,029

	PURCHASE	ISSUES	ADJUST	INVENTORY
2007				
JAN	6,764	7,150		1,062,394
FEB	10,872	11,611		1,061,655
MAR	11,159	4,360		1,068,454
APR	6,109	4,737		1,069,826
MAY	4,604	7,392		1,067,038
JUN	3,814	3,523		1,067,329
JUL	2,424	2,485		1,067,268
AUG	2,848	24,128		1,045,988
SEP	6,494	4,211		1,048,271
OCT	14,580	6,648		1,056,203
NOV	16,691	13,028		1,059,866
DEC	30,204	1,480		1,088,590
TOT	116,563	90,753		1,088,590

CA-IR-82

Ref: T-5, page 97, lines 1-4; Production Materials Inventory Changes.

Please provide a detailed explanation and quantification for any projected changes to historical inventory levels or inventory content items to add new inventory items for newly added equipment or designs or to otherwise depart from trending of historical information.

HELCO Response:

The 2006 test year estimate was determined by using a 13-month averaging method. This averaging method estimates future months based on the most recent 13 months (either actual or estimated). This includes the most recent additions for inventory items attributable to the commissioning of CT-4 and CT-5. The inventory level increase from 2004 to 2005 was \$3,000 or 0.3%, from 2005 to projected 2006 (HELCO-549) is \$54,965 or 5.5%, and from projected 2006 to projected 2007 is \$27,000 or 2.5%. If we updated HELCO-549 (see Attachment 3 of HELCO's response to CA-IR-81) with the most recent months of actual charges, the TY 2006 inventory balance would be \$1.064 million versus the \$1.062 million as stated in HELCO T-5.

CA-IR-83

Ref: HELCO WP-511; Runtime Hours.

The workpaper indicates increased budgeted runtime hours for Shipman 3 and 4 units, as described throughout T-5 testimony, as well as significantly reduced runtime hours for several other units. Please provide the following information:

- a. Given the projected lower (than historical levels) runtimes budgeted for Keahole CT2, Waimea, Kanoelehua and Dispersed Generation, please explain how/if such reduced utilization has been considered in budgeting labor and non-labor operations expenses for each unit.
- b. Given the projected lower (than historical levels) runtimes budgeted for Keahole CT2, Waimea, Kanoelehua and Dispersed Generation, please explain how/if such reduced utilization has been considered in budgeting labor and non-labor maintenance expenses for each unit.
- c. Provide historical actual production non-fuel operations expenses separately for each of the units Keahole CT2, Waimea, Kanoelehua and Dispersed Generation, for each year 2003, 2004, 2005 and 2006 year-to-date by cost type and RA.
- d. Provide historical actual production maintenance expenses separately for each of the units Keahole CT2, Waimea, Kanoelehua and Dispersed Generation, for each year 2003, 2004, 2005 and 2006 year-to-date by cost type and RA.
- e. Provide comparable test year projected O&M by unit and explain variations in such data relative to your response to parts (c) and (d) of this information request, indicating how reduced runtime assumptions are considered in such comparisons.

HELCO Response:

- a. Projected runtimes for CT-2 determined during the budget process were considered in budgeting non-labor operations expenses that were variable and dependent upon run hours, such as the cost of the demineralizer chemicals shown in the response to CA-IR-2, HELCO T-5, Attachment 2A, page 23, and the Waimea and Kanoelehua lube oil expense calculation shown on CA-IR-2, HELCO T-5, Attachment 2A, page 24. (Note that the run hours are not identical to the run hours resulting from the updated Production Simulation used in the rate case. However, the run hours for the units are relatively low in both Production

Simulations.) For the Dispersed Generation, Waimea, and Kanoelehua diesel units, non-project costs (i.e., labor and non-labor) are incurred largely for routine or calendar based maintenance activities, such as regular plant checks, and although run hours may have an impact here, they are not taken into account.

As explained in HELCO T-5, HELCO has a normalized overhaul schedule for the project related work of each generating unit in 2006. Although HELCO schedules a PO (i.e., overhaul or inspection) of each steam and combustion turbine unit each year, budgeted run hours (together with results from specialized inspection of critical parts) are utilized when budgeting for significant items that would occur during the PO (i.e., hot section, major field inspection or turbine major inspection) for certain units, including CT-2 (which uses "equivalent" run hours), as seen in Attachment 1 to the response to CA-IR-56.a on overhaul intervals.

The actual operating hours of peaking units, such as the diesel units and CT-2, are difficult to capture in the production simulation, as these units are operated for unplanned outages (such as an unexpected deration of Puna Geothermal Venture as discussed in HELCO CA-IR-47), short-term system events (such as the loss of another generating unit or loss of a transmission line as discussed in HELCO CA-IR-45), and other transient and abnormal conditions. HELCO's experience has been that the running hours on CT-2 in particular tend to be higher than anticipated by the pmonth simulation (see Attachment 1 for HELCO CA-IR-54, Pages 1 and 2). The running hours on the diesels and CT-2 have been higher in August 2006 due to overhauls and the unexpected deration of Puna Geothermal Venture. (The calibration factor, as discussed in HELCO T-4, is used to account for these differences between actual system operation and the production simulation, in calculating

fuel expense.) The basis for the diesel unit overhauls is based on the manufacturer's recommendations. The entire diesel fleet has been aggressively overhauled over the past several years and the oldest engine is less than half way to the overhaul interval of 16,000 hours. Subsequently, an overhaul was completed in 2006 on the spare engine that is used when a permanently installed engine is removed for overhaul, and moved the remaining scheduled engine overhaul to 2007 as no other engine warranted an overhaul at this time. Currently average engine run hours is at 1700 hours, with 7 under 1000 hours, one at 3500 hours and the oldest at 6500 hours. The dispersed diesel run hours in aggregate since commissioning in 1998 is 4213 hours as of August 1, 2006. Individual run hours are not readily available. Based on an 8000 hour overhaul interval, and with each engine having accumulated approximately 1,100 hours, it will be some time before a dispersed engine is required to be overhauled, based on the current usage. As stated above in regards to CT-2, it is difficult to predict the engine run hours as many unforeseen circumstances can result in extended running of the diesel units to meet demand. For example in 2000 and 2002, the dispersed units were operated for 943 and 1152 hours respectively, in aggregate. By comparison, in 2004 and 2005, the dispersed units operated 169 and 114 hours respectively, in aggregate. Usage was moderate in 2001 and 2003, with 495 and 350 run hours accrued.

- b. See response to item a.
- c. See Attachment 1.
- d. See Attachment 1.
- e. Attachment 1 shows comparable test year O&M estimates by unit. Response a, discusses runtime assumptions and budgeting.

Hawaii Electric Light Company Inc.

2006 TEST YEAR
2003 - current Historical CT2, Waimea, Kanoelehua and DGs

Source: HELCO-WP-101C	(B)				Operating	HELCO-WP-510	(A)	Variance
	2003_Actual	2004_Actual	2005_Actual	YTD(Jun) 2006_Actual	2006_Budget	Adjustment/ Normalization	TY 2006_Budge	(A) - (B)
NI 546250 OP SUPV&ENG-WAIMEA	693	333	140	216	-		-	(140)
NI 548250 GEN-OTH PROD-WAIMEA	31,612	22,673	27,085	11,992	51,601		51,601	24,516
NI 549250 MISC PROD-WAIMEA	19,899	2,482	14,615	16,499	17,615		17,615	3,000
WAIMEA NON-FUEL OPERATIONS EXI	52,204	25,488	41,840	28,707	69,216	-	69,216	27,376
NI 551250 MNT SUPV&ENG-WAIMEA	876	10,797	9,279	10,284	-		-	(9,279)
NI 552250 MNT STRUC-WAIMEA	44,655	38,790	37,891	26,467	66,456		66,456	28,565
NI 553250 M ELEC PLT-WAIMEA	179,105	396,486	452,657	34,298	202,972	330,000	532,972	80,315
WAIMEA MAINTENANCE EXP	224,636	446,073	499,827	71,050	269,428	330,000	599,428	99,601
WAIMEA TOTAL	276,840	471,561	541,667	99,757	338,644	330,000	668,644	126,977
NI 546260 OP SUPV&ENG-KANOE	15,935	20,198	100,889	21,496	45,793		45,793	(55,096)
NI 548260 GEN-OTH PROD-KANOE	12,920	5,397	9,079	206	34,694		34,694	25,615
NI 549260 MISC PROD-KANOE	51,989	58,723	244,708	68,255	74,229		74,229	(170,479)
KANOE NON-FUEL OPERATIONS EXP	80,844	84,318	354,676	89,957	154,716	-	154,716	(199,960)
NI 551260 MNT SUPV&ENG-KANOE	55,297	72,900	152,878	125,230	104,109		104,109	(48,769)
NI 552260 MNT STRUC-KANOE	126,580	141,922	71,894	81,510	167,756		167,756	95,862
NI 553260 M ELEC PLT-KANOE	805,161	250,182	349,945	128,056	698,515		698,515	348,570
NI 554260 M MISC PLT-KANOE	6,058	1,116	1,358	492	1,421		1,421	63
KANOE MAINTENANCE EXP	993,096	466,120	576,075	335,287	971,801	-	971,801	395,726
KANOE TOTAL	1,073,940	550,438	930,751	425,244	1,126,517	-	1,126,517	195,766
NI 546290 OP SUPV&ENG-KEAH CT2	2,866	-	-	8,395	15,889		15,889	15,889
NI 548290 GEN-OTH PROD-KEA CT2	185,379	181,412	49,187	12,347	217,157		217,157	167,970
NI 549290 MISC PROD-KEAHOLE CT	77,234	111,645	124,531	132,985	62,075		62,075	(62,456)
CT2 NON-FUEL OPERATIONS EXP	265,479	293,057	173,718	153,727	295,121	-	295,121	121,403
NI 551290 MNT SUPV&ENG-KEA CT2	10,582	6,892	20,845	29,000	76,433		76,433	55,588
NI 552290 MNT STRUC-KEAH CT2	-	-	-	444	352		352	352
NI 553290 M ELEC PLT-KEAHOL CT	173,107	209,857	1,132,958	513,682	2,160,131	(1,400,000)	760,131	(372,827)
CT2 MAINTENANCE EXP	183,689	216,749	1,153,803	543,126	2,236,916	(1,400,000)	836,916	(316,887)
CT2 TOTAL	449,168	509,806	1,327,521	696,853	2,532,037	(1,400,000)	1,132,037	(195,484)
NI 549400 Oth Misc-Disp Gen#24	3,719	106	12,902	5,391	5,372		5,372	(7,530)
NI 549410 Oth Misc-Disp Gen#25	3,838	106	12,902	4,548	5,062		5,062	(7,840)
NI 549420 Oth Misc-Disp Gen#26	3,838	106	1,538	4,745	5,372		5,372	3,834
NI 549430 Oth Misc-Disp Gen#27	3,838	106	26	344	5,062		5,062	5,036
DG NON-FUEL OPERATIONS EXP	15,233	424	27,368	15,029	20,868	-	20,868	(6,500)
NI 551400 Maint Sup-Disp Gen#24	-	-	279	9,832	-		-	(279)
NI 553400 Maint OH-Disp Gen#24	8,479	5,407	3,660	2,340	4,496	150,000	154,496	150,836
NI 551410 Maint Sup-Disp Gen#25	-	-	-	2,611	-		-	-
NI 553410 Maint OH-Disp Gen#25	8,170	6,825	2,678	669	4,942		4,942	2,264
NI 551420 Maint Sup-Disp Gen#26	-	-	279	5,140	-		-	(279)
NI 553420 Maint OH-Disp Gen#26	8,971	6,315	10,850	4,135	4,250		4,250	(6,600)
NI 551430 Maint Sup-Disp Gen#27	-	-	-	3,636	-		-	-
NI 553430 Maint OH-Disp Gen#27	6,754	5,252	12,716	2,510	3,912		3,912	(8,804)
DG MAINTENANCE EXP	32,374	23,799	30,462	30,873	17,600	150,000	167,600	137,138
DG TOTAL	47,607	24,223	57,830	45,902	38,468	150,000	188,468	130,638

CA-IR-84

Ref: T-6, page 3 (Standard Labor Rates).

T-6 states that HELCO utilizes Standard Labor Rates to convert man-hours into direct labor dollars. Please describe what role, if any, Distribution Department personnel served in the quantification of standard labor rates applied in the 2006 test year forecast.

HELCO Response:

The Management Accounting Division sent an excel file to the Distribution department with the 2004 recorded Distribution department employees wages and hours from the payroll register.

The file was reviewed and modified for employees who were hired in 2004 and worked only part of 2004 but were projected to work the entire 2006. Their partial year 2004 wages/hours were increased to reflect a full twelve months of employment in 2006. In addition, the employee count was adjusted to match the projected staffing by deleting those employees that retired and adding new hires. The modified file was sent back to Management Accounting for calculation of Standard Labor Rates for each labor class.

CA-IR-85

Ref: T-6, pages 4, 28-30, 64-66 & HELCO-602 (Trouble Inspectors).

The referenced testimony describes the role of Trouble Inspectors and describes HELCO's plan to expand trouble inspector coverage from 16-hours per day (i.e., from 7:00 am to 11:00 pm) to 24-hours per day. At page 29, the referenced testimony indicates that increased coverage should improve response to automobile accidents that damage HELCO facilities. At pages 64-66, HELCO had six (6) trouble inspector positions filled at year end 2005, with ten (10) planned by year-end 2006. Please provide the following:

- a. Please explain when HELCO first began using trouble inspectors and how many were added in 2004 and 2005.
- b. At page 28, T-6 indicates that HELCO-610 shows that customer hours of interruption, due to automobile accidents, increased from 14,822 in 2000 to 57,127 in 2005. Since the current trouble inspector coverage is from 7:00 am to 11:00 pm, please provide the following information for 2005 automobile accidents. [Note: If the request automobile accident information is not available, please so state and instead provide hours of customer service interruption.]
 1. Please provide the total number of automobile accidents that occurred in 2005 which caused the interruption of service to HELCO customers.
 2. Referring to the response to part (b)(1) of this information request, please provide the number of automobile accidents during period of 7:00 am to 11:00 pm.
 3. Referring to the response to part (b)(1) of this information request, please provide the number of automobile accidents during period of 11:00 pm to 7:00 am.

HELCO Response:

- a. HELCO has used trouble inspectors in the Hilo District for many years. The exact start date is not certain but for the last 15 years HELCO has used three (3) trouble inspectors covering two (2) shifts per day seven (7) days per week in the Hilo District. As discussed in HELCO T-6, page 65, the use of three trouble inspectors in West Hawaii began in 2004 on a trial basis and in 2005 the positions were filled on a regular basis. A total of six (6) trouble inspectors are now used to provide Island-wide coverage for 2 shifts per day, 7 days per week.

b.

1. A total of 49 automobile accidents occurred in 2005 which caused interruption of service to HELCO customers.
2. Of the 49 automobile accidents that occurred in 2005 that caused interruption of service to HELCO customers, 28 occurred between 7 a.m. and 11 p.m.
3. Of the 49 automobile accidents that occurred in 2005 that caused interruption of service to HELCO customers, 21 occurred between 11 p.m. and 7 a.m. It should be noted that of the 57,127 hours of customer interruption due to automobile accidents in 2005, 47,718 hours or 84% were during the hours of 11 p.m. and 7 a.m.

CA-IR-86

Ref: T-6, page 9 & HELCO-608 (T&D Overtime).

At lines 8-12, the referenced testimony states: "To meet the new customer demand in 2005, HELCO construction and maintenance employees worked at 35%, 35% and 29% overtime levels in Hilo, Kona and Waimea respectively and still could not keep up with the demand. The Company contracted crews from the mainland to mitigate the work load. As shown in HELCO-608, this level of overtime has continued into 2006." Please provide the following:

- a. In developing the 2006 test year rate case forecast, did the Company reduce the forecast level of overtime to be worked as a direct result of the additional employees included in the 2006 rate case forecast?
 1. If so, please provide a quantification of the reduced overtime level attributed to the planned hiring of additional employees.
 2. If not, please explain why the addition of new T&D employees is not expected to distribute work requirements over a larger employee pool thereby reducing the level of overtime worked.
 3. Please provide a copy of all workpapers, spreadsheets and all other supporting documents associated with the responses to parts (a)(1) and (a)(2) of this information request.

- b. In developing the 2006 test year rate case forecast, did the Company reduce the forecast level of mainland contract work crews as a direct result of the additional employees included in the 2006 rate case forecast?
 1. If so, please provide a quantification of the reduction in contract work crews attributed to the planned hiring of addition employees.
 2. If not, please explain why the addition of new T&D employees is not expected to distribute work requirements over a larger employee pool thereby reducing the need for contract work crews.
 3. Please provide a copy of all workpapers, spreadsheets and all other supporting documents associated with the responses to parts (b)(1) and (b)(2) of this information request.

HELCO Response:

- a. Yes, for the Technical Division crews the forecast level of overtime was reduced as a result of the additional employees included in the 2006 rate case forecast. For all other divisions

in the Distribution Department, the overtime levels were not reduced as a result of the additional employees included in the 2006 rate case forecast.

1. As shown on HELCO-608, page 1 of 1, the Technical Division overtime in the 2006 forecast was reduced due to the additional new hires. The overtime was reduced from 4,261.2 hours recorded in 2004 to 2,796 hours projected in 2006. It should be noted that as of June 2006 the year to date overtime hours for the Technical Division is already at 4,360 hours. As shown in the response to IR-96, page 3 of 9, as of June 2006, 23 of the 25 forecasted positions in the Technical Division are filled. The substation maintenance program requirements, capital projects, additional training and inexperience of new employees are all contributing to the higher than projected overtime levels in the Technical Division.
 2. For Hilo, Kona, and Waimea construction and maintenance crews, a reduction in overtime levels was not projected as a result of the additional staffing. Review of work requirements indicated that the construction and maintenance crews would be required to continue to build new facilities for new customers and perform capital work for other system projects. Also, it was anticipated that not all of the new hires would be fully qualified, resulting in lower productivity and overtime to make up the difference.
 3. An updated HELCO-608 is attached with the June 2006 year-to-date recorded data and the straight time hours, see page 4 of 4.
- b. No, as described in HELCO T-6, page 60, HELCO supervisors evaluate the work to be accomplished and determine if HELCO employees or contractors will perform the work. Based on the review of work requirements HELCO anticipated that the use of Mainland contractors would be necessary to accomplish all of the planned work. However, the level

of contracting to perform capital work was not projected as part of the 2006 rate case forecast. As described in HELCO T-6, during periods when there are high levels of capital construction, HELCO increases overtime for its employees and expands the use of contract labor. When work demands diminish, contract labor and planned overtime are reduced.

1. This is not applicable.
2. As described in the response to part a-1 of this IR, not all of the new hires are fully qualified. Lower experience levels in the workforce lowers the productivity, requiring overtime and the continued use of contractors to accomplish the required work.

The response to CA-IR-96, page 4 of 9 provides a list of positions and employee count for the Technical Division. Working foremen, electricians, apprentice electricians, technician relaymen and linemen are fully qualified journey level employees who perform substation construction and maintenance work. Apprentice electricians, senior helpers and helpers are in training to become journey level employees. As of the end of June 2006 there were 13 journey level workers and 7 apprentices and helpers.

Apprentices and helpers require the oversight and training by journey level employees and for safety reasons apprentices and helpers are not allowed to work alone. Oversight and training, which are over and above normal work tasks, often slow down the journey level employees and lower their productivity.

Similarly, the response to CA-IR-96, page 5, 6 and 9 provides lists of positions and employee counts in the Hilo Construction and Maintenance Division, Kona Construction and Maintenance Division and Waimea Construction and Maintenance Division. In the Construction and Maintenance Divisions, working foremen, servicemen, linemen, trouble inspectors and senior inspectors are fully qualified journey

level employees. Apprentices, senior helpers and helpers are in training to become journey level employees. At the end of June 2006, there were 20 journey level employees and 9 apprentices and helpers in the Hilo C&M Division. There were 11 journey level employees and 5 apprentices and helpers in the Kona C&M Division. There were 8 journey level employees and 4 apprentices and helpers in the Waimea Division. In total, there are 39 journey level employees and 18 apprentice and helpers in the C&M Divisions. Because the trouble inspector and senior inspector positions typically work alone and do not provide oversight to apprentices and helpers, there are effectively 32 journey level employees that provide oversight and training for 18 apprentices and helpers in the C&M Divisions. Such a high ratio of apprentices slows down and reduces the productivity of the journey level employees in the C&M Divisions.

3. An updated copy of HELCO-608 is attached.

Hawaii Electric Light Company, Inc.

OVERTIME

Line	A	B	C	D	E	F	G	H	
	2000 Recorded	2001 Recorded	2002 Recorded	2003 Recorded	2004 Recorded	2005 Recorded	2006 Forecast	06/06YTD Recorded	
<u>Overtime Hours</u>									
1	HDC-TECHCREW	2,823.7	1,813.6	3,355.7	4,078.7	4,261.2	7,375.4	2,796.0	4,360.4
2	HDH-CREW (Hilo)	15,859.3	8,306.3	11,655.9	14,627.1	14,845.6	15,485.0	14,796.0	9,766.1
3	HDK-CREW (Kona)	6,069.8	7,924.6	11,757.8	10,067.1	11,492.3	8,377.2	11,000.0	5,022.0
4	HDW-CREW (Waimea)	7,631.0	5,197.9	6,264.5	6,366.5	6,654.5	4,869.5	6,264.0	2,715.4
<u>ST Hours</u>									
1	HDC-TECHCREW	31,318.5	31,687.0	26,603.3	28,935.1	25,718.1	26,486.3	37,936.0	18,975.3
2	HDH-CREW (Hilo)	53,211.5	42,272.5	38,208.5	40,289.1	41,439.9	44,667.5	53,188.0	25,931.5
3	HDK-CREW (Kona)	19,835.5	19,684.5	24,381.0	23,779.0	23,610.4	23,933.0	33,732.0	15,337.0
4	HDW-CREW (Waimea)	23,712.8	17,808.0	16,999.0	17,571.2	19,262.5	16,522.1	23,496.0	10,299.8
<u>Overtime % of ST</u>									
1	HDC-TECHCREW	9%	6%	13%	14%	17%	28%	7%	23%
2	HDH-CREW (Hilo)	30%	20%	31%	36%	36%	35%	28%	38%
3	HDK-CREW (Kona)	31%	40%	48%	42%	49%	35%	33%	33%
4	HDW-CREW (Waimea)	32%	29%	37%	36%	35%	29%	27%	26%

Note: Revised HELCO-608, Docket No. 05-0315, Page 1 of 1.

CA-IR-87

Ref: T-6, page 9 & HELCO-608 (T&D Overtime & Contractors).

At lines 8-12, the referenced testimony states: "To meet the new customer demand in 2005, HELCO construction and maintenance employees worked at 35%, 35% and 29% overtime levels in Hilo, Kona and Waimea, respectively and still could not keep up with the demand. The Company contracted crews from the mainland to mitigate the work load. As shown in HELCO-608, this level of overtime has continued into 2006." Please provide the following:

- a. The electronic file supplied by the Company in support of HELCO-608 is a Word file, rather than a spreadsheet file.
 1. If available, please provide a spreadsheet file containing the overtime and straight time hours used to calculate the overtime percentage set forth on HELCO-608 for calendar years 2000-2005 (actual) and the 2006 forecast.
 2. If the requested spreadsheet is not available, please provide the level of T&D straight time hours used in computing the overtime percentage of straight time pay by RA for each period set forth on HELCO-608.
- b. Does the 2006 forecast data set forth on HELCO-608 represent the straight time and overtime hours included in HELCO's 2006 test year rate case forecast?
 1. If not, please provide comparable data attributable to the rate case forecast.
 2. If this information cannot be provided, please explain why.
- c. For each year from 2000-2005 (actual) and 2006 (forecast), please provide the relative distribution of straight time and overtime hours between O&M and non-O&M accounts.
- d. Please provide the level of T&D contract expense included in HELCO's 2006 test year rate case forecast.

HELCO Response:

- a. Yes, the electronic file supplied in HELCO-608 is a Word file.
 1. This is not available.
 2. The revised HELCO-608 was submitted in HELCO's response to CA-IR-86, page 5.
- b. Yes, the HELCO-608 includes all hours for O&M, Capital, and Clearing.
 1. This is not applicable.

2. This is not applicable.
- c. Standard labor rates are used to cost to the individual accounts. Therefore, the exact allocation of straight time and overtime hours between O&M and non-O&M accounts for years 2000-2005 are not available. For the 2006 forecast the percentages to O&M, Capital, and Clearing are based on historical percentages shown on HELCO T-6's response to CA-IR-1, part b, page 237 of 243.
- d. The T&D O&M contract expense included in HELCO's 2006 test year rate case forecast is shown on HELCO-WP-101 (G), page 745-768 under the 500 series expense elements.

CA-IR-88

Ref: T-6, page 11, HELCO-609 & HELCO-610 (T&D Reliability).

At lines 10-24 of the reference testimony, HELCO T-6 indicates that the Company “normalizes” its service reliability data to remove “abnormal” situations, which provides “a clearer picture of how the Company’s systems are performing under typical conditions and enable more dependable identification of system problems and strengths.” Please provide the following:

- a. Please confirm that the above description accurately characterizes the referenced testimony. If this cannot be confirmed, please explain.
- b. The T&D system reliability data presented on HELCO-609 and HELCO-610 is identified as “not normalized.” Please confirm that these documents are accurately identified as “not normalized.”
- c. Although “normalized” data provides a “clearer picture” of how the Company’s systems are performing under typical conditions, please confirm that HELCO does not maintain the data required to present HELCO-609 and HELCO-610 on a “normalized” basis. If this cannot be confirmed, please provide the data set forth in HELCO-609 and HELCO-610 on a normalized basis.
- d. Please provide the electronic spreadsheet file (with all cell formulae, workpaper tabs and file link intact and not converted to values) supporting HELCO-609 and HELCO-610, as filed by HELCO. [Note: The electronic files previously provided by the Company are in Word and Powerpoint formats.]

HELCO Response:

- a. The description accurately characterizes the referenced testimony.
- b. The documents are accurately identified as “not normalized”.
- c. HELCO does maintain normalized and not normalized data. At the time HELCO T-6 was filed there were no reports that extracted data for normalized T&D related interruptions only. A report was developed to extract this data. An updated version of HELCO-609 with normalized data is provided on pages 2 of this response. An updated version of HELCO-610 with normalized data is provided on pages 3 to 23 of this response.
- d. The electronic files for the updated versions of HELCO-609 and HELCO-610 with normalized data are provided.

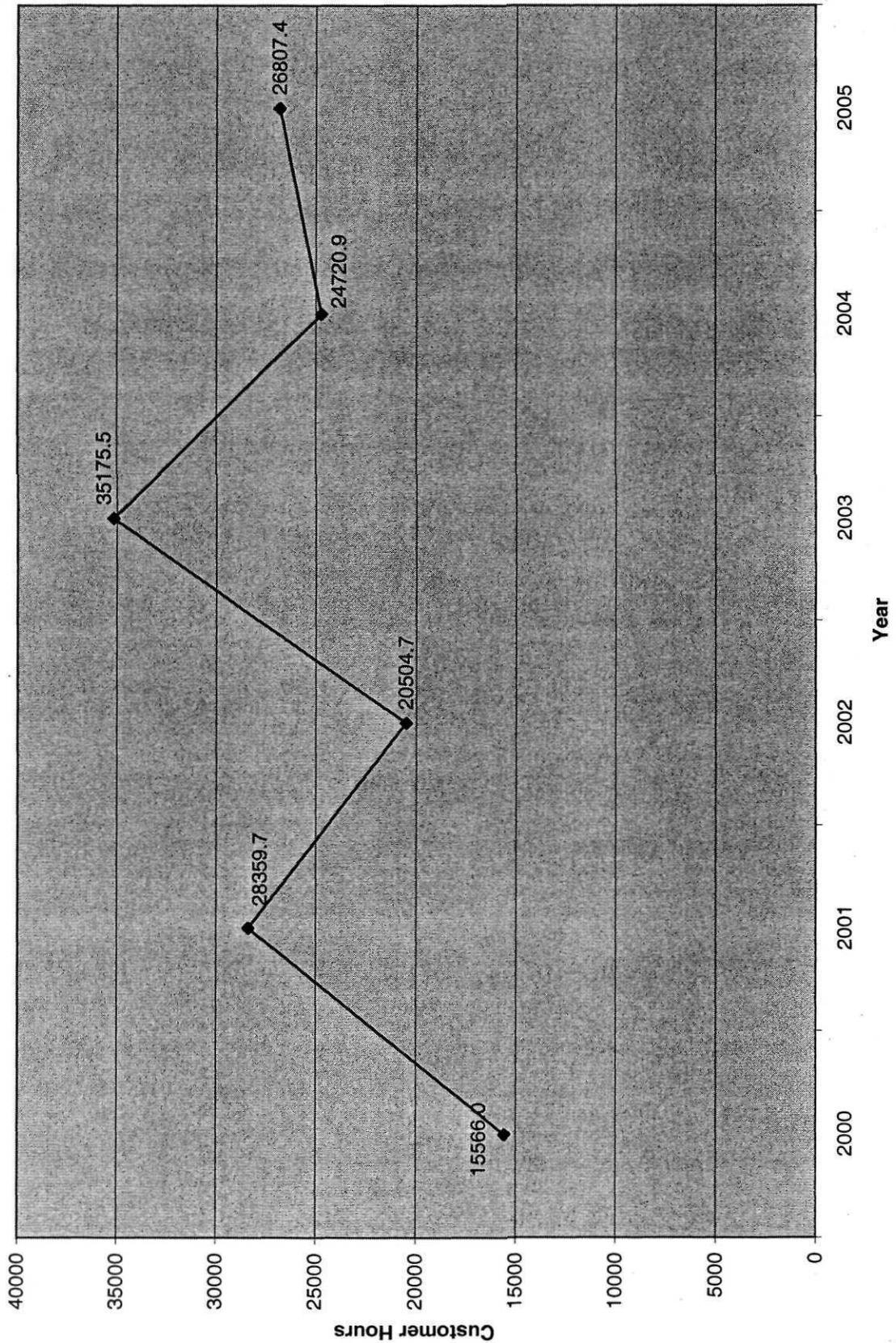
Hawaii Electric Light Company, Inc.

T&D SYSTEM RELIABILITY DATA (NORMALIZED)

item	A		B		C		D		E		F	
	2000 Recorded	0.966	2001 Recorded	1.294	2002 Recorded	1.909	2003 Recorded	2.337	2004 Recorded	1.252	2005 Recorded	1.492
1	System Average Interruption Frequency (SAIF)	61.50	70.86	63.69	77.49	93.07	108.51					
2	Customer Average Interruption Duration (CAID)	99.988	99.983	99.977	99.966	99.978	99.969					
3	Annual System Availability (ASA)	15,566	28,360	20,505	35,176	24,721	26,807					
4	Trees or Branches (Customer Hours)	111	10,458	21,591	9,098	1,516	1,796					
5	Lightning (Customer Hours)	989	7,407	15,627	27,561	7,701	3,353					
6	High Winds (Customer Hours)	14,525	7,162	12,745	41,541	20,732	57,127					
7	Auto Accident (Customer Hours)	5,303	2,469	9,317	11,239	15,310	51,827					
8	Cable Fault (Customer Hours)	13,561	12,721	0	9,916	10,966	12,211					
9	Deterioration (Customer Hours)	7,620	4,106	12,854	19,270	20,261	1,360					
10	Equipment Failure (Customer Hours)											

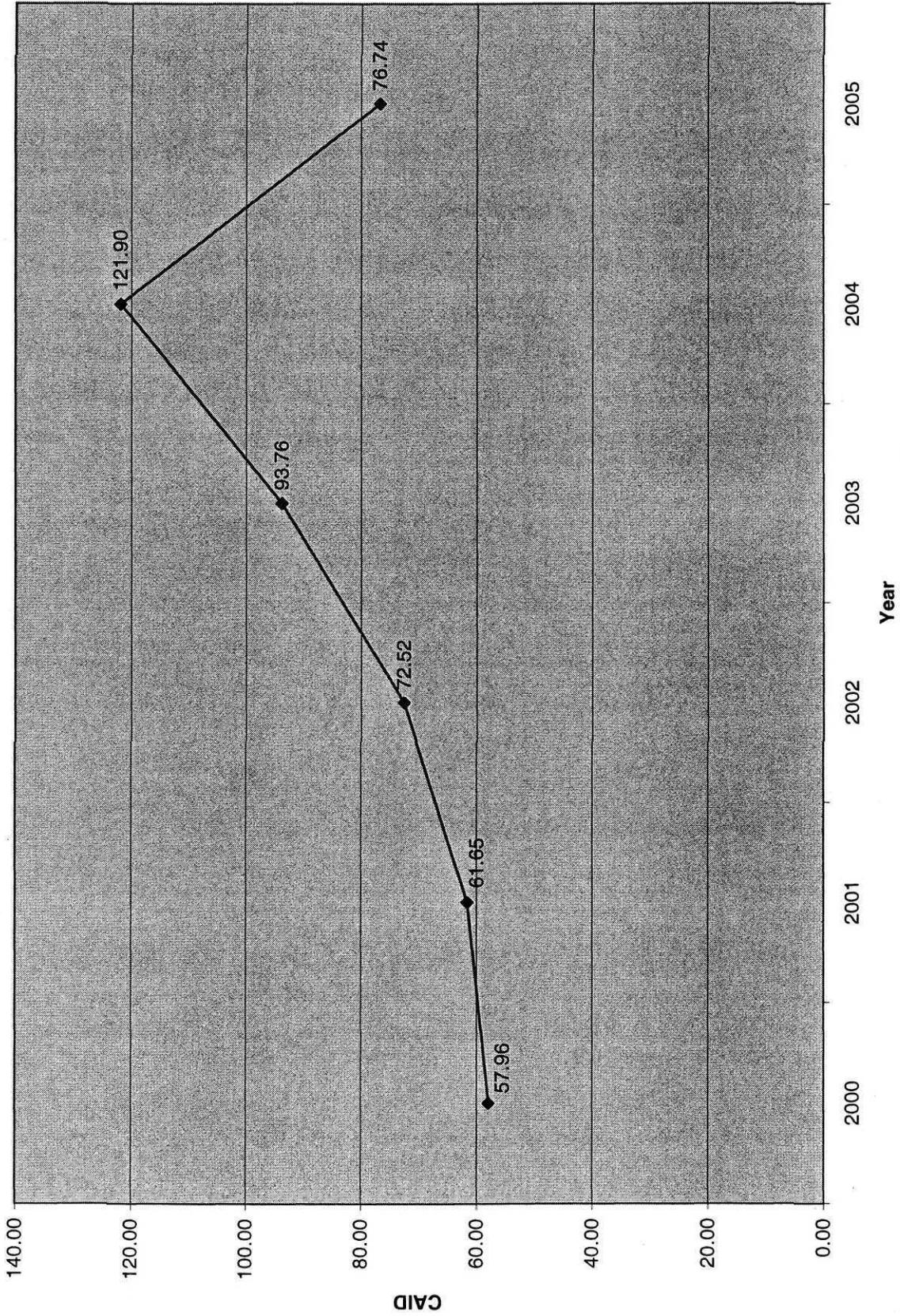
HELCO-610

**TREES AND BRANCHES
CUSTOMER HOURS OF INTERRUPTION-NORMALIZED**



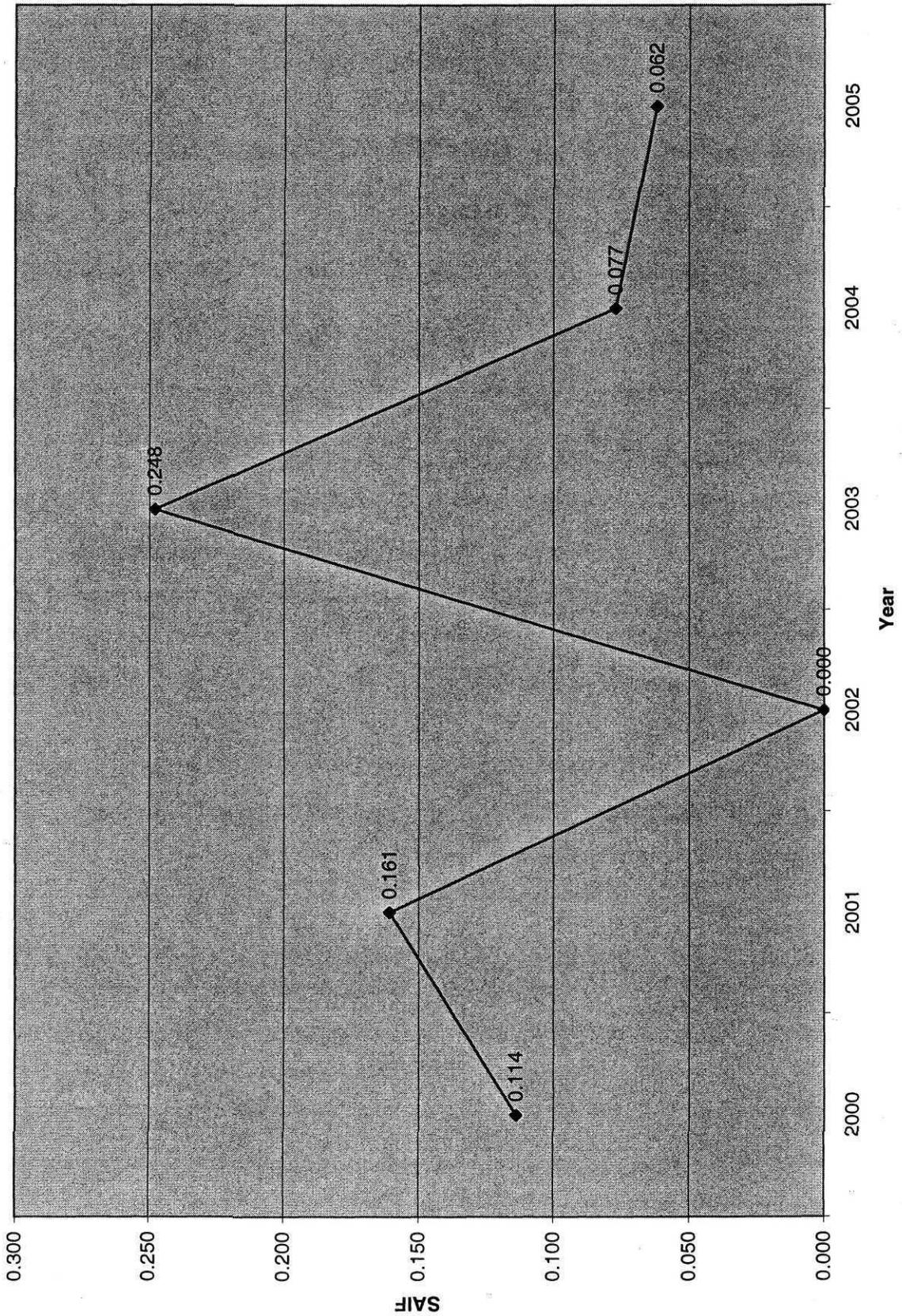
HELCO-610

TREES AND BRANCHES
CUSTOMER AVERAGE INTERRUPTION DURATION (CAID)-NORMALIZED



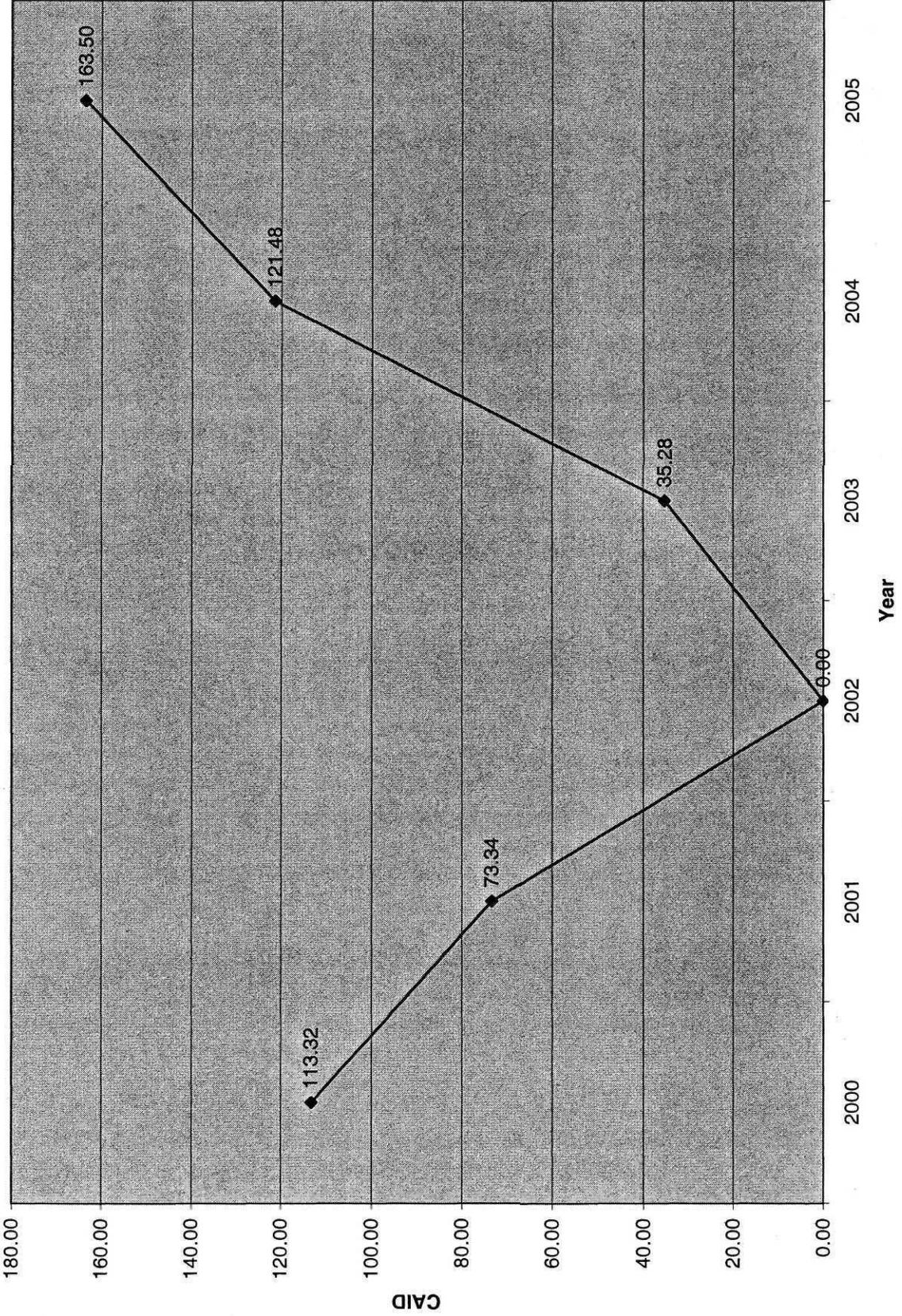
HELCO-610

**DETERIORATION
SYSTEM AVERAGE INTERRUPTION FREQUENCY (SAIF)-NORMALIZED**



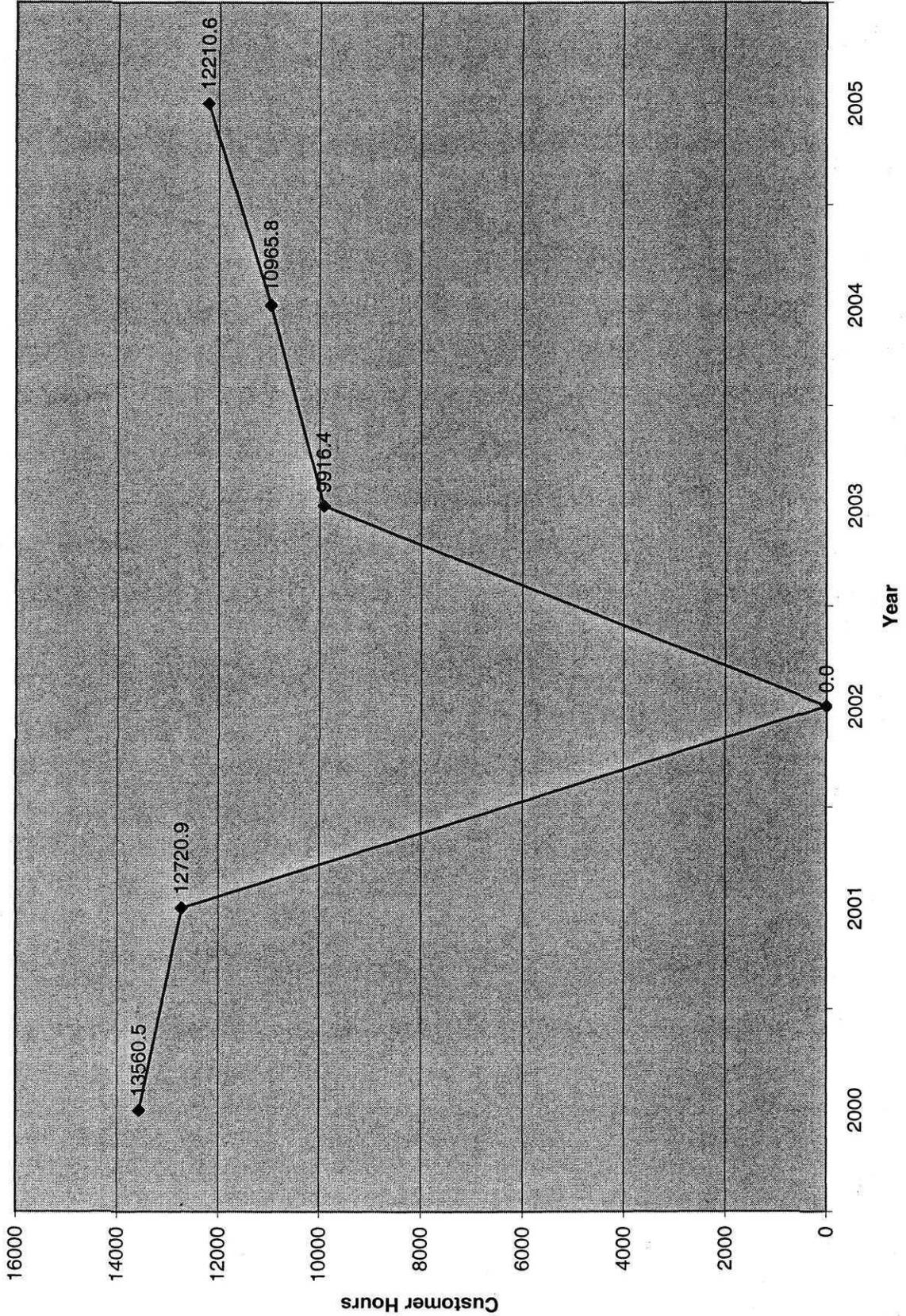
HELCO-610

DETERIORATION
CUSTOMER AVERAGE INTERRUPTION DURATION (CAID)-NORMALIZED



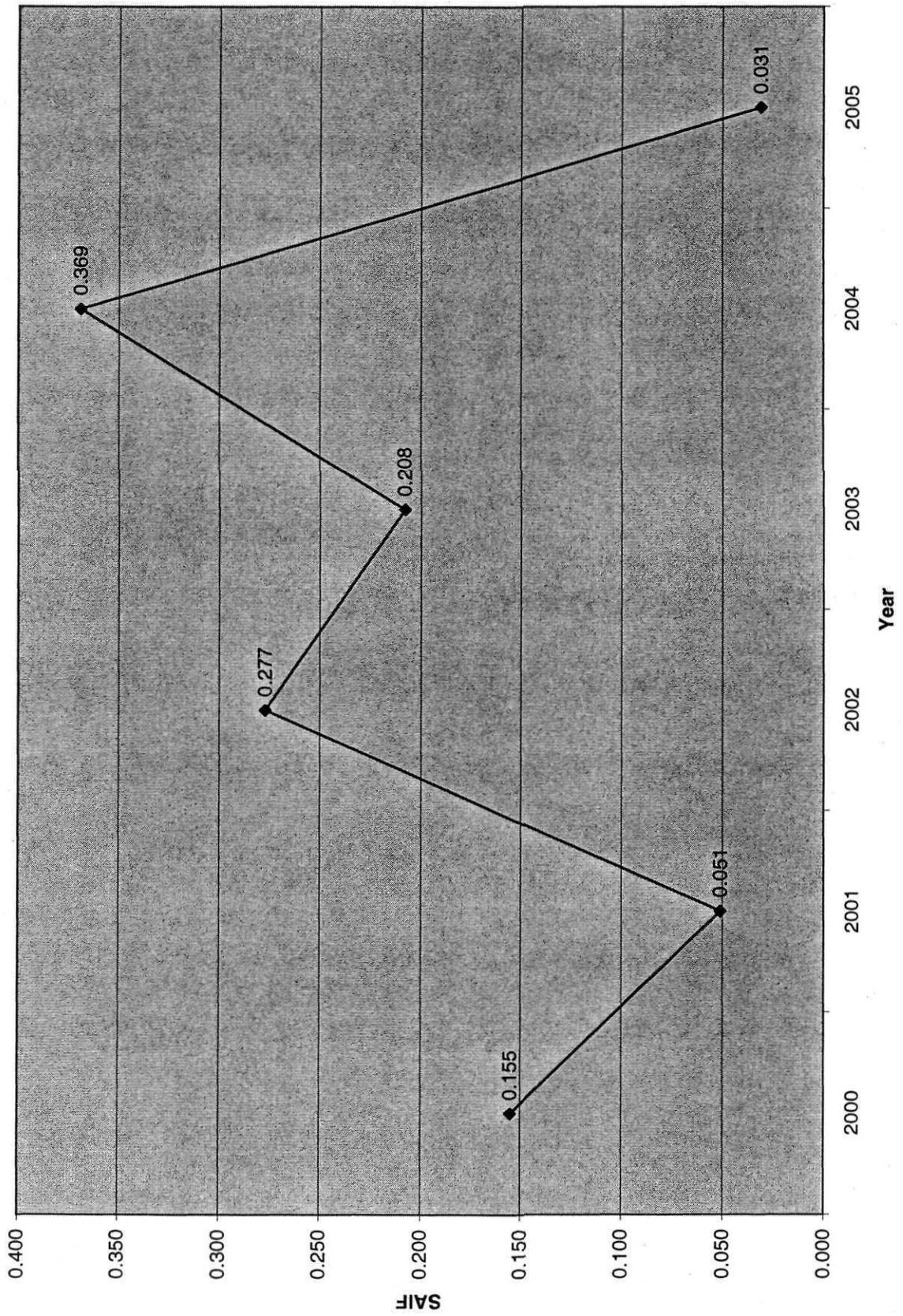
HELCO-610

**DETERIORATION
CUSTOMER HOURS OF INTERRUPTION-NORMALIZED**



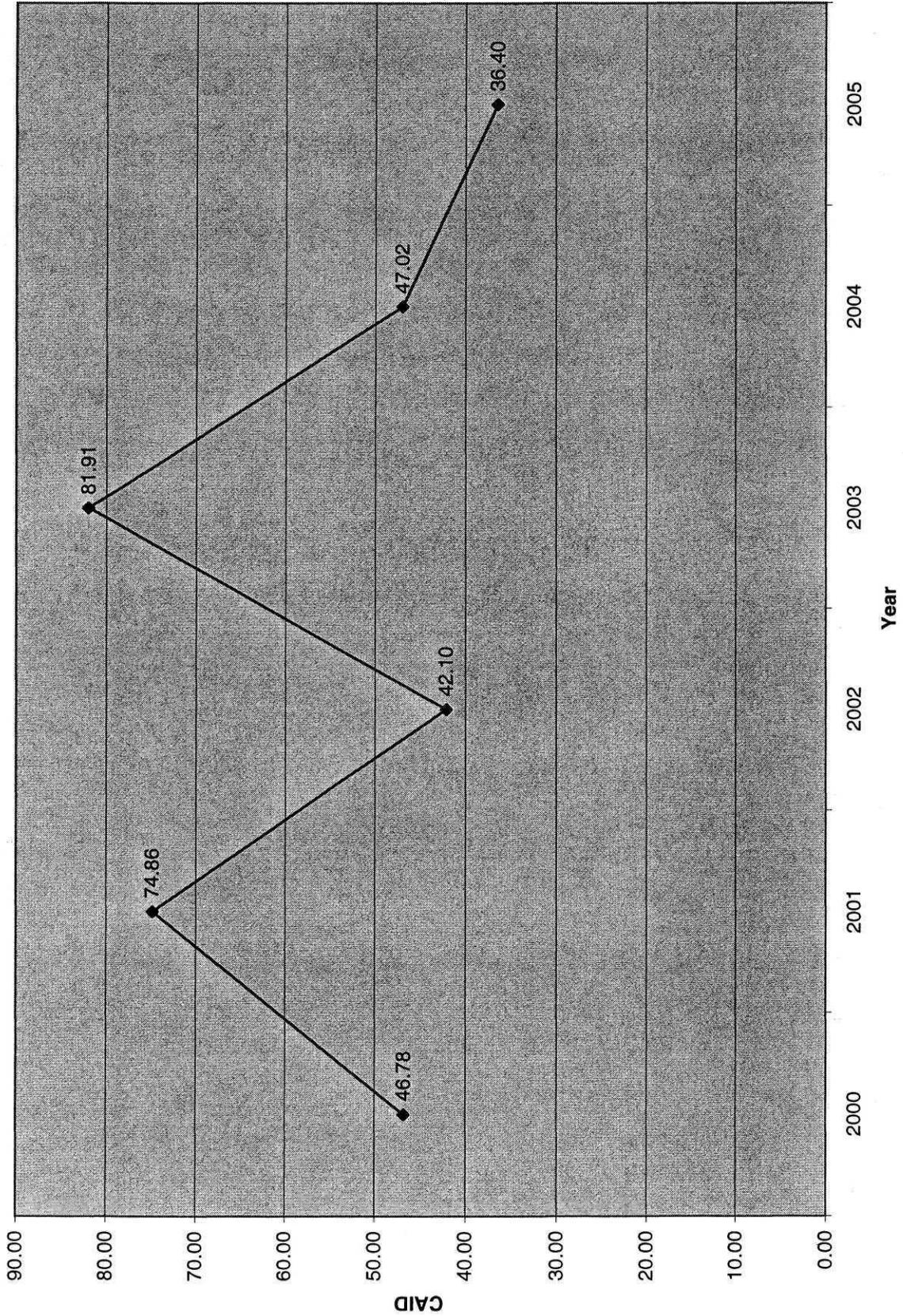
HELCO-610

**EQUIPMENT FAILURE
SYSTEM AVERAGE INTERRUPTION FREQUENCY (SAIF)-NORMALIZED**



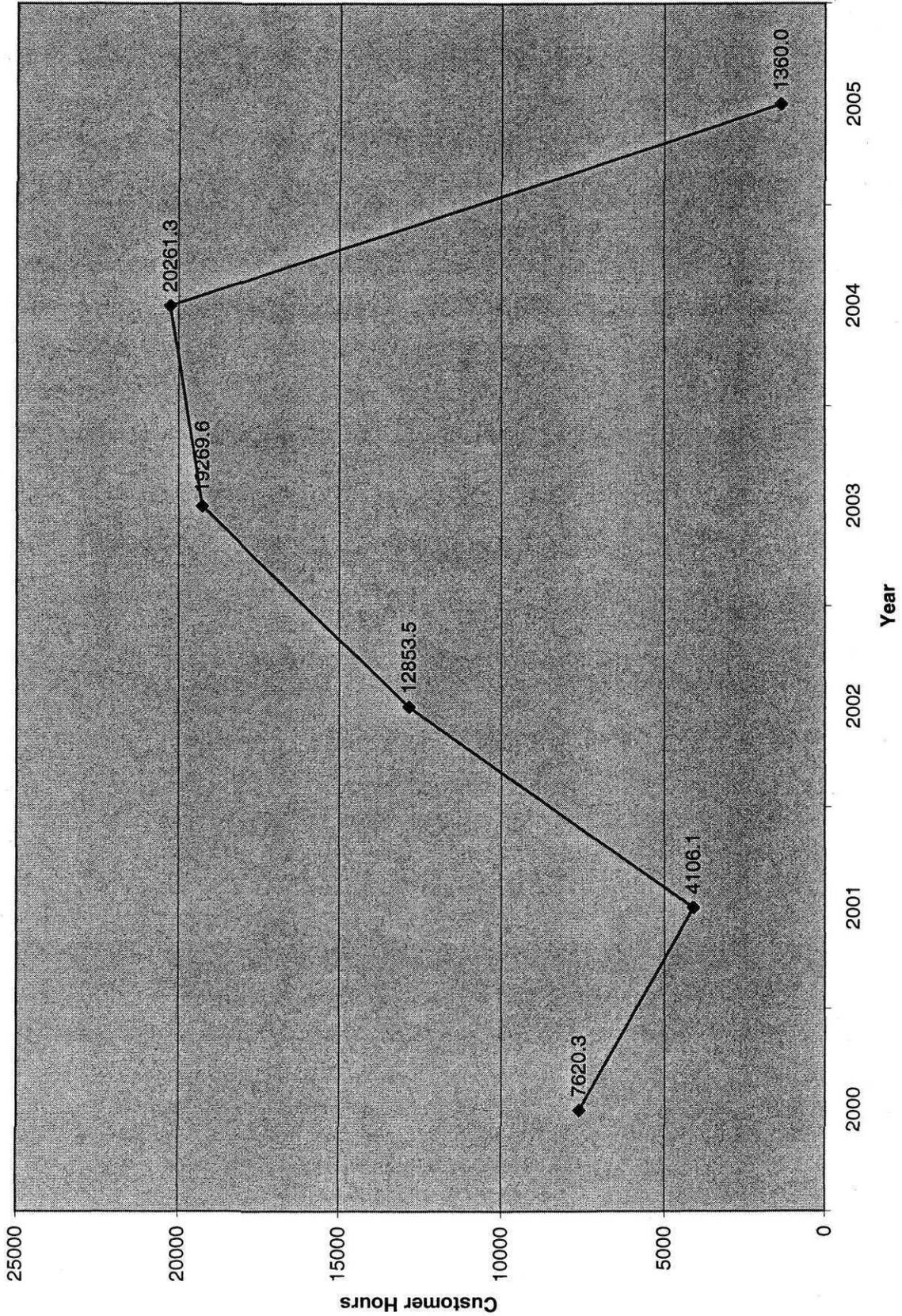
HELCO-610

**EQUIPMENT FAILURE
CUSTOMER AVERAGE INTERRUPTION DURATION (CAID)-NORMALIZED**



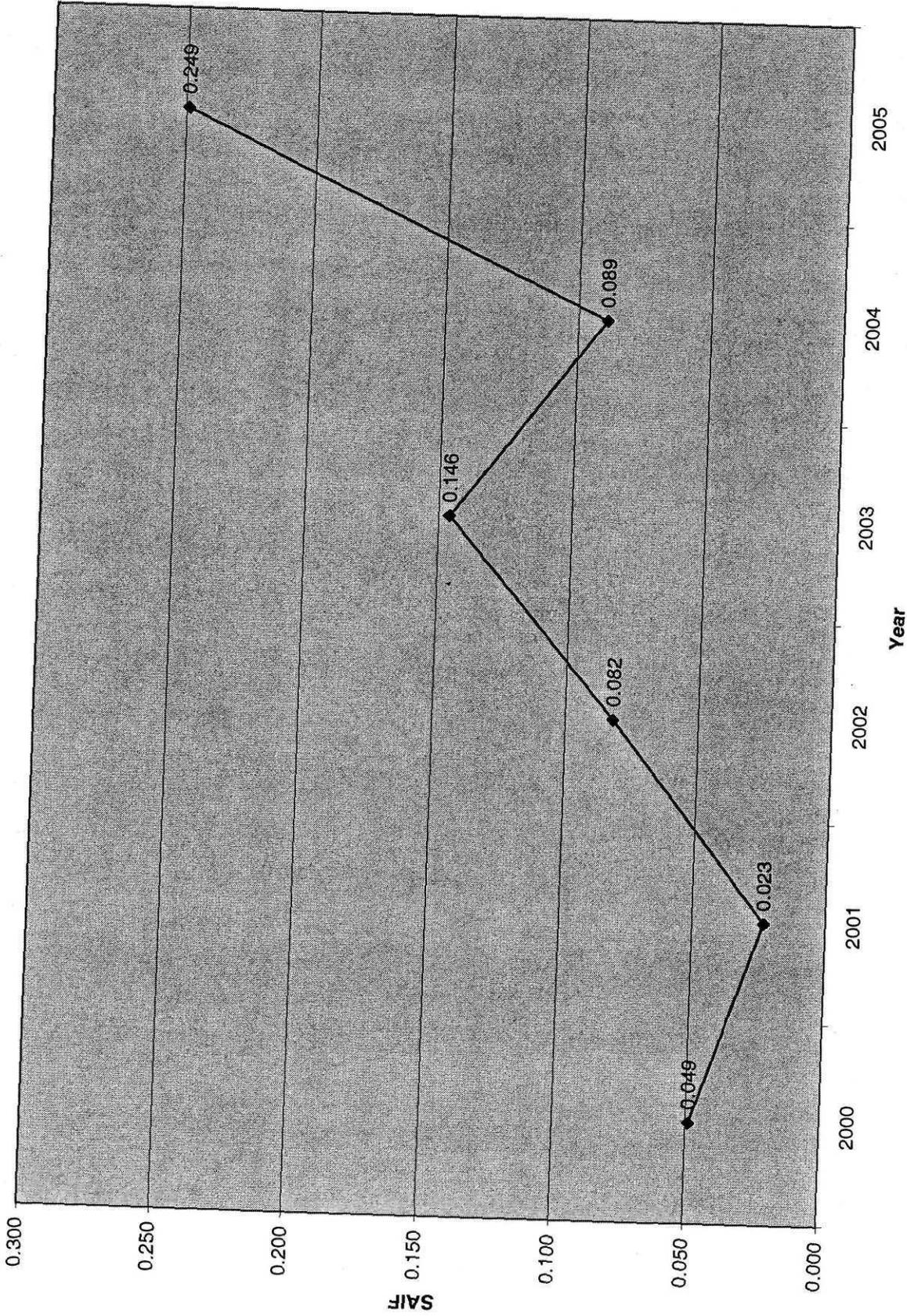
HELCO-610

**EQUIPMENT FAILURE
CUSTOMER HOURS OF INTERRUPTION-NORMALIZED**



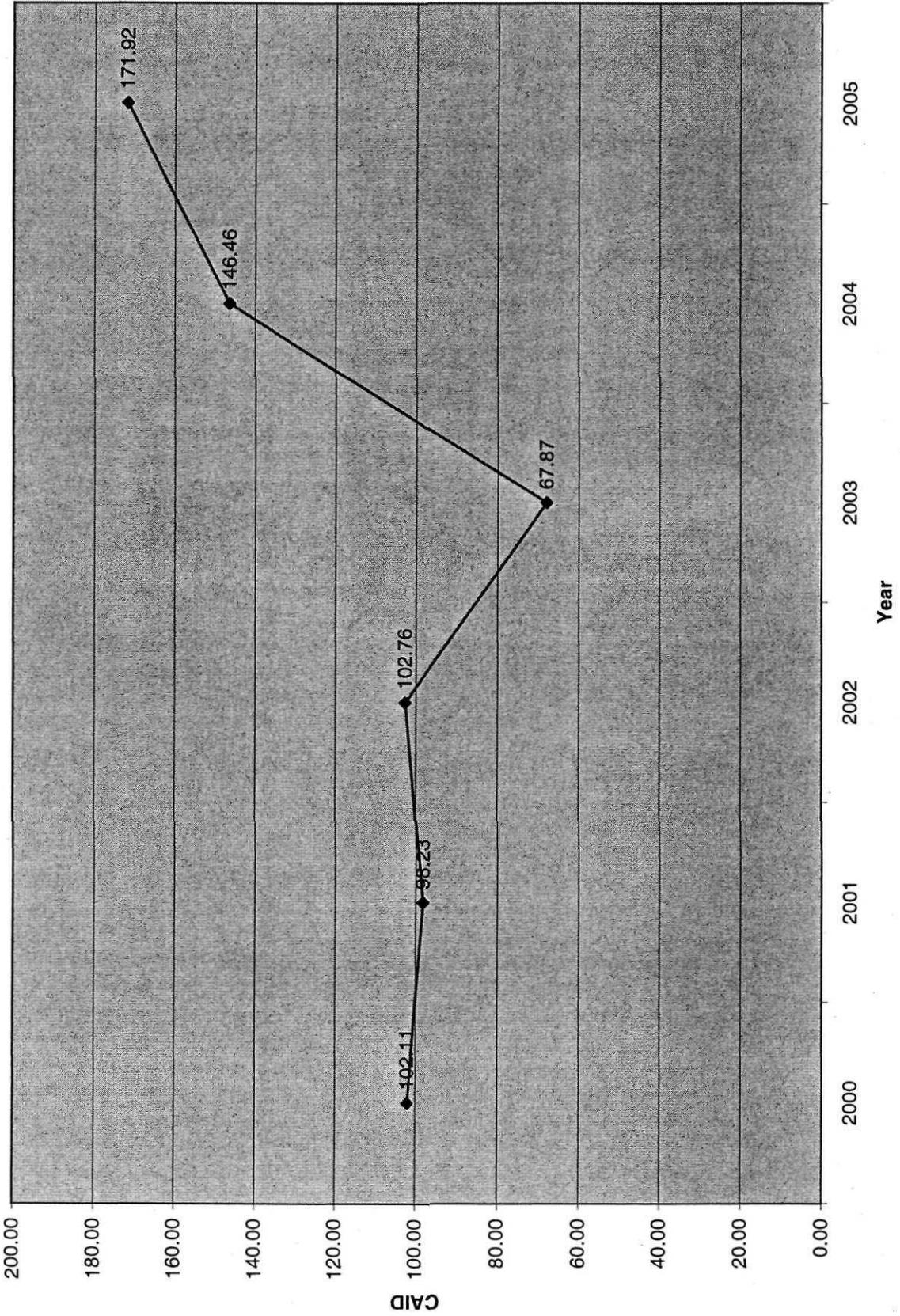
HELCO-610

CABLE FAULTS
SYSTEM AVERAGE INTERRUPTION FREQUENCY (SAIF)-NORMALIZED



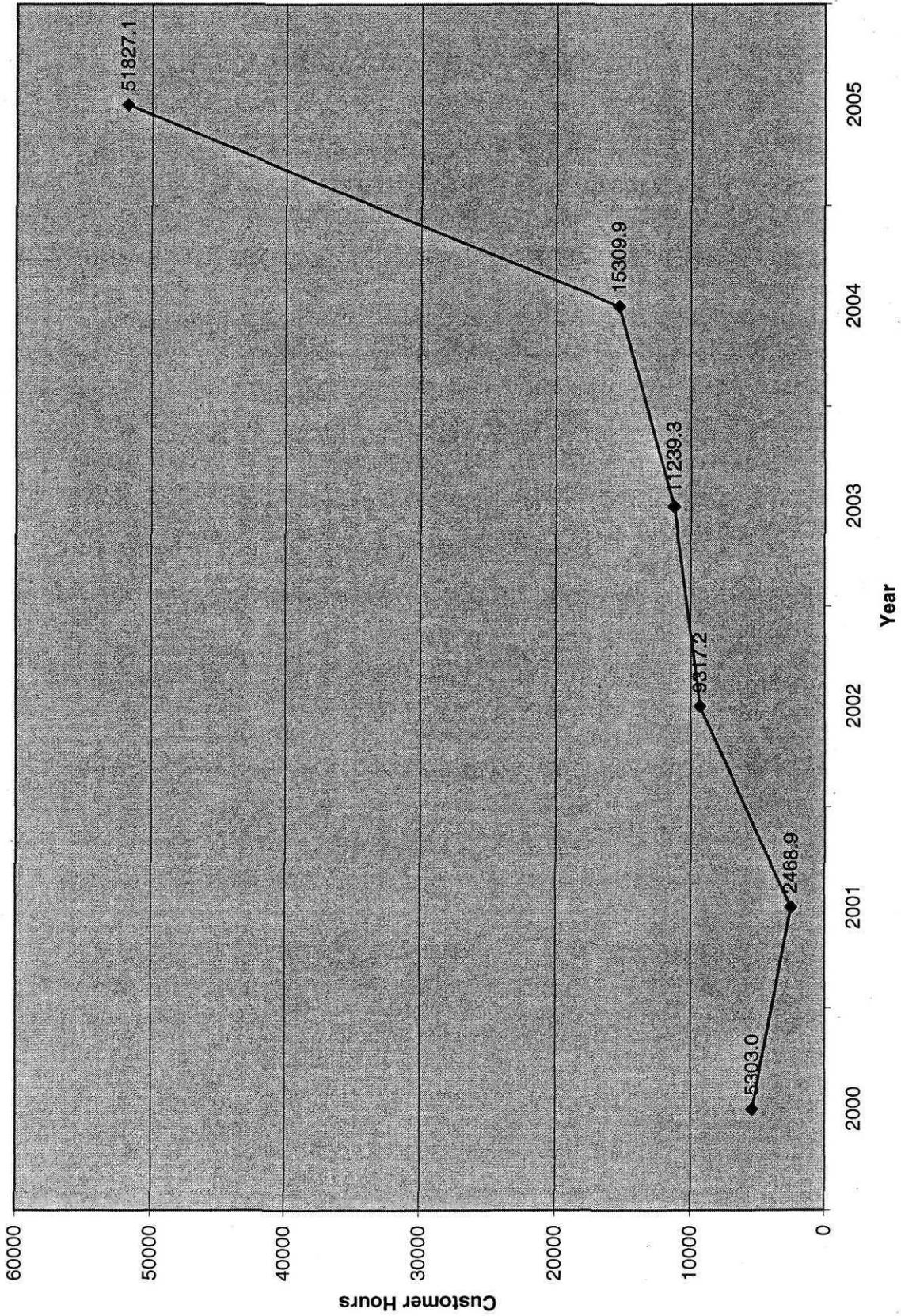
HELCO-610

**CABLE FAULT
CUSTOMER AVERAGE INTERRUPTION DURATION (CAID)-NORMALIZED**



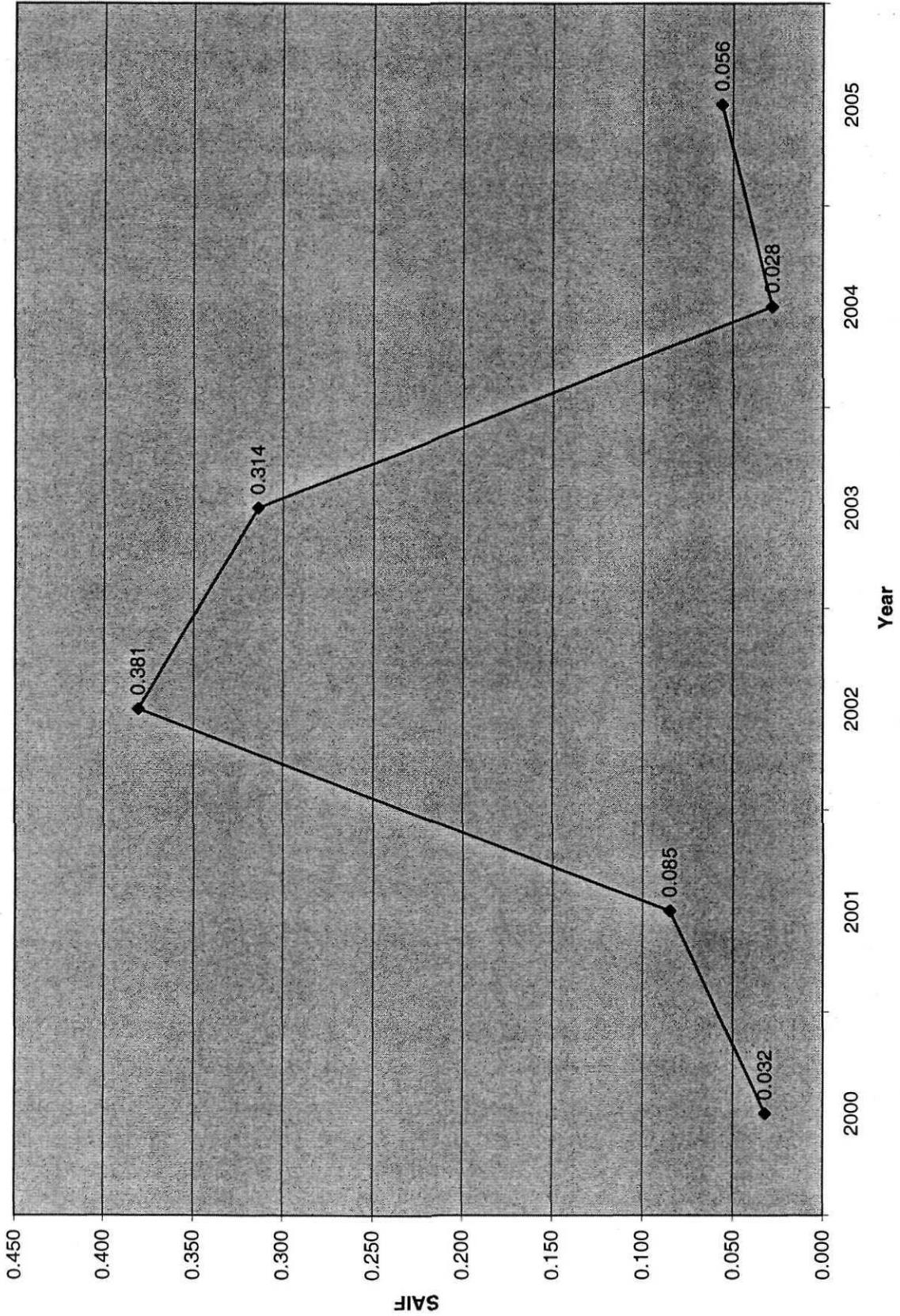
HELCO-610

**CABLE FAULT
CUSTOMER HOURS OF INTERRUPTION-NORMALIZED**



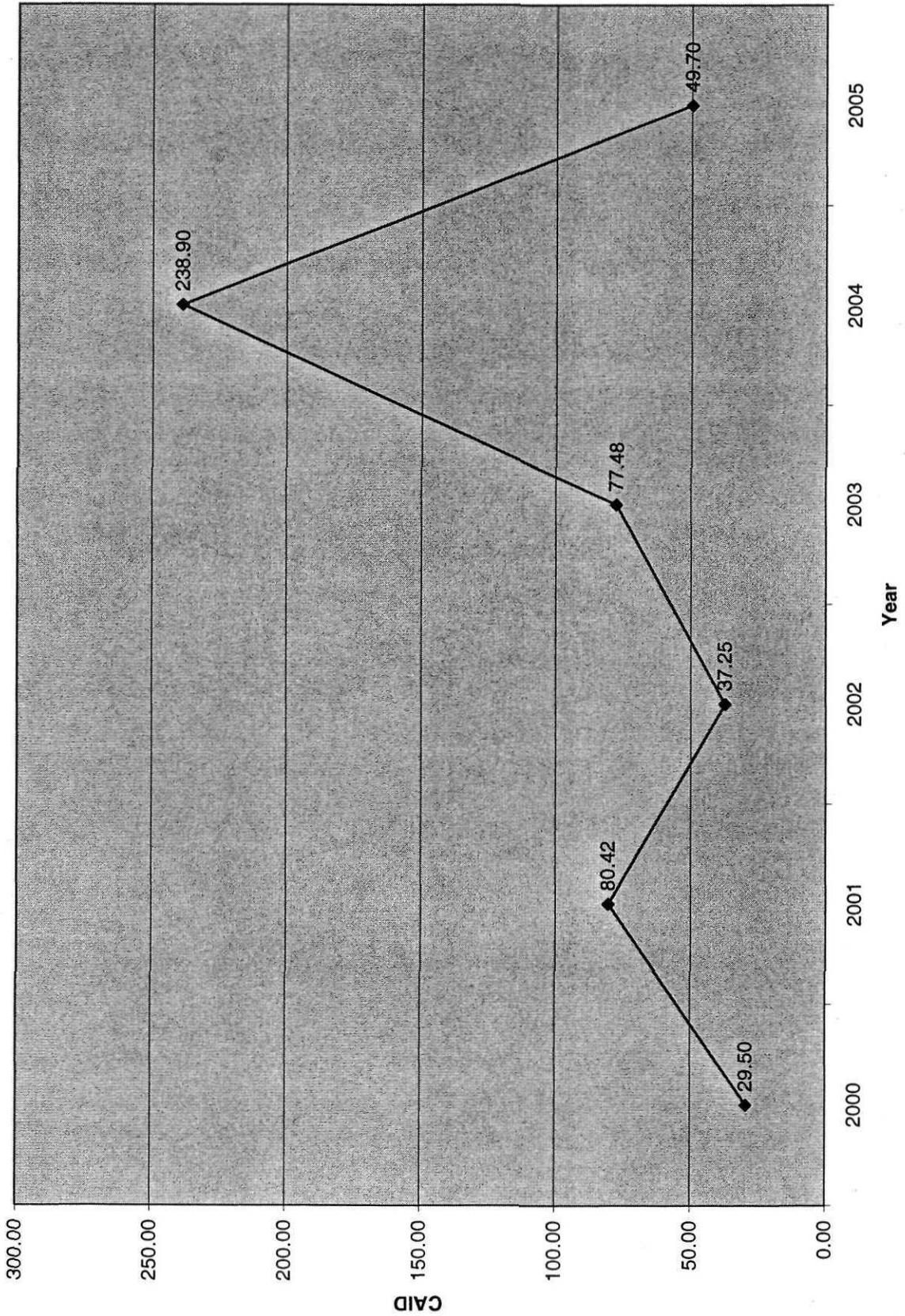
HELCO-610

HIGH WINDS
SYSTEM AVERAGE INTERRUPTION FREQUENCY (SAIF)-NORMALIZED



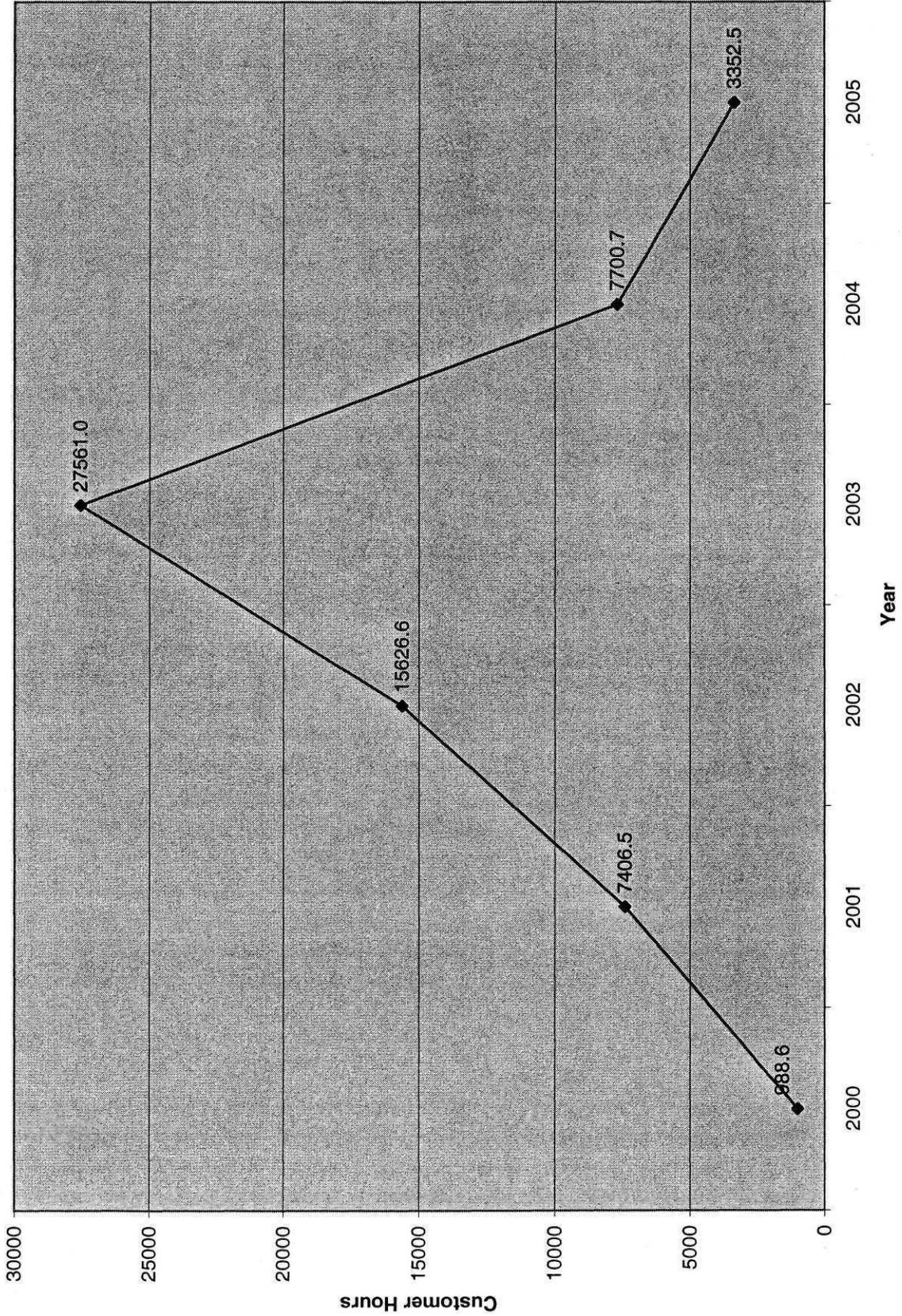
HELCO-610

HIGH WINDS
CUSTOMER AVERAGE INTERRUPTION DURATION (CAID)-NORMALIZED



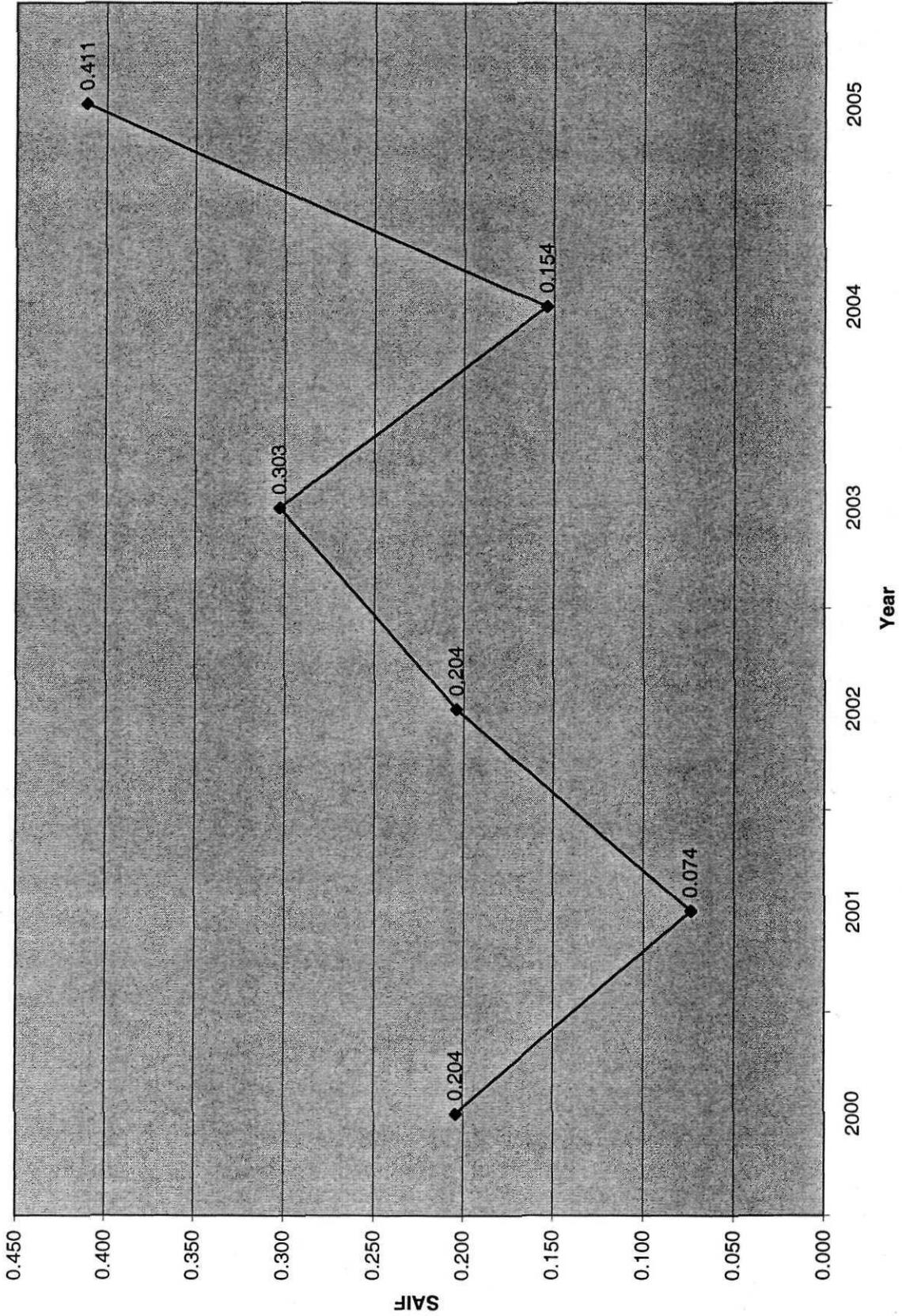
HELCO-610

**HIGH WINDS
CUSTOMER HOURS OF INTERRUPTION-NORMALIZED**



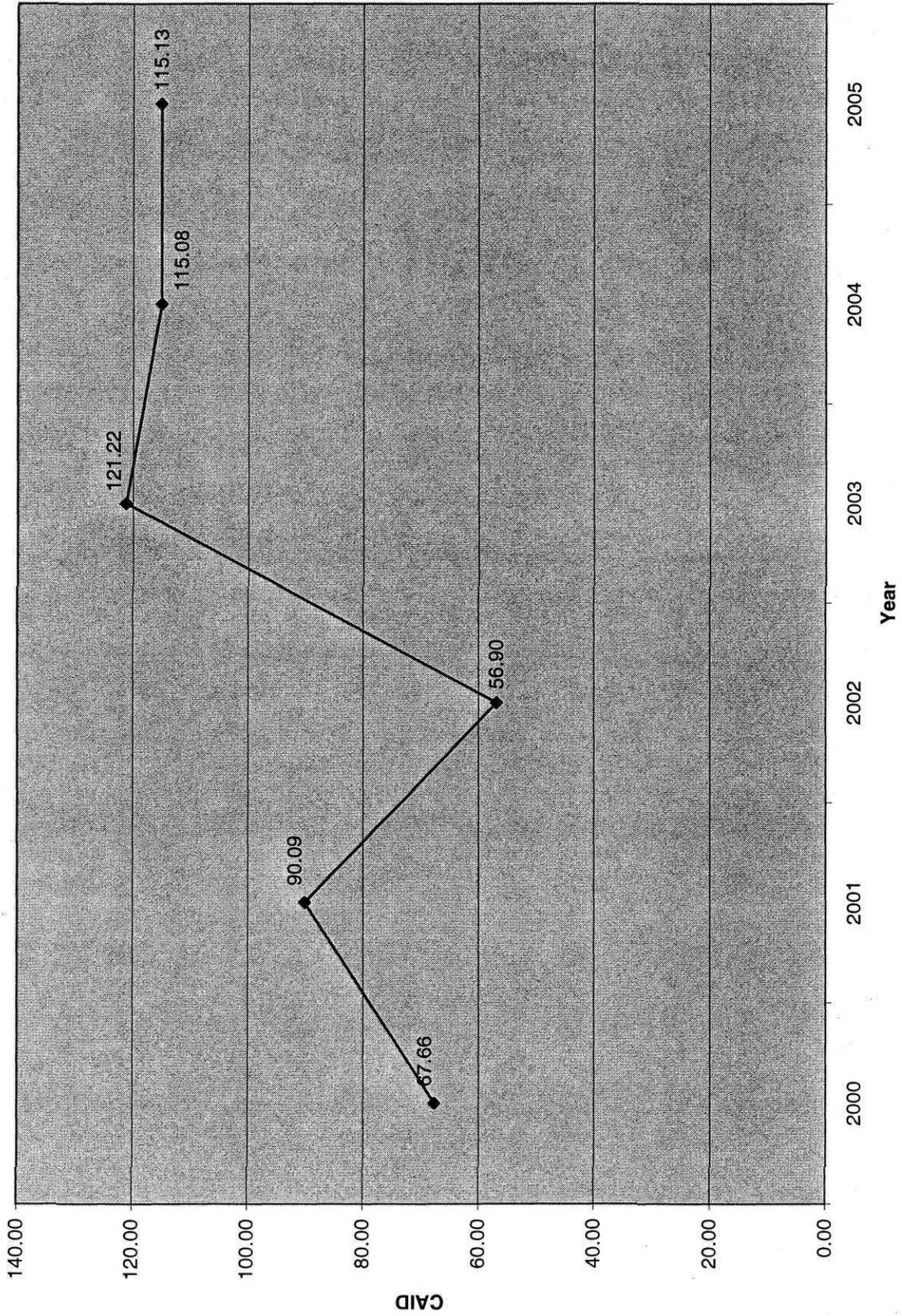
HELCO-610

**AUTO ACCIDENT
SYSTEM AVERAGE INTERRUPTION FREQUENCY (SAIF)-NORMALIZED**



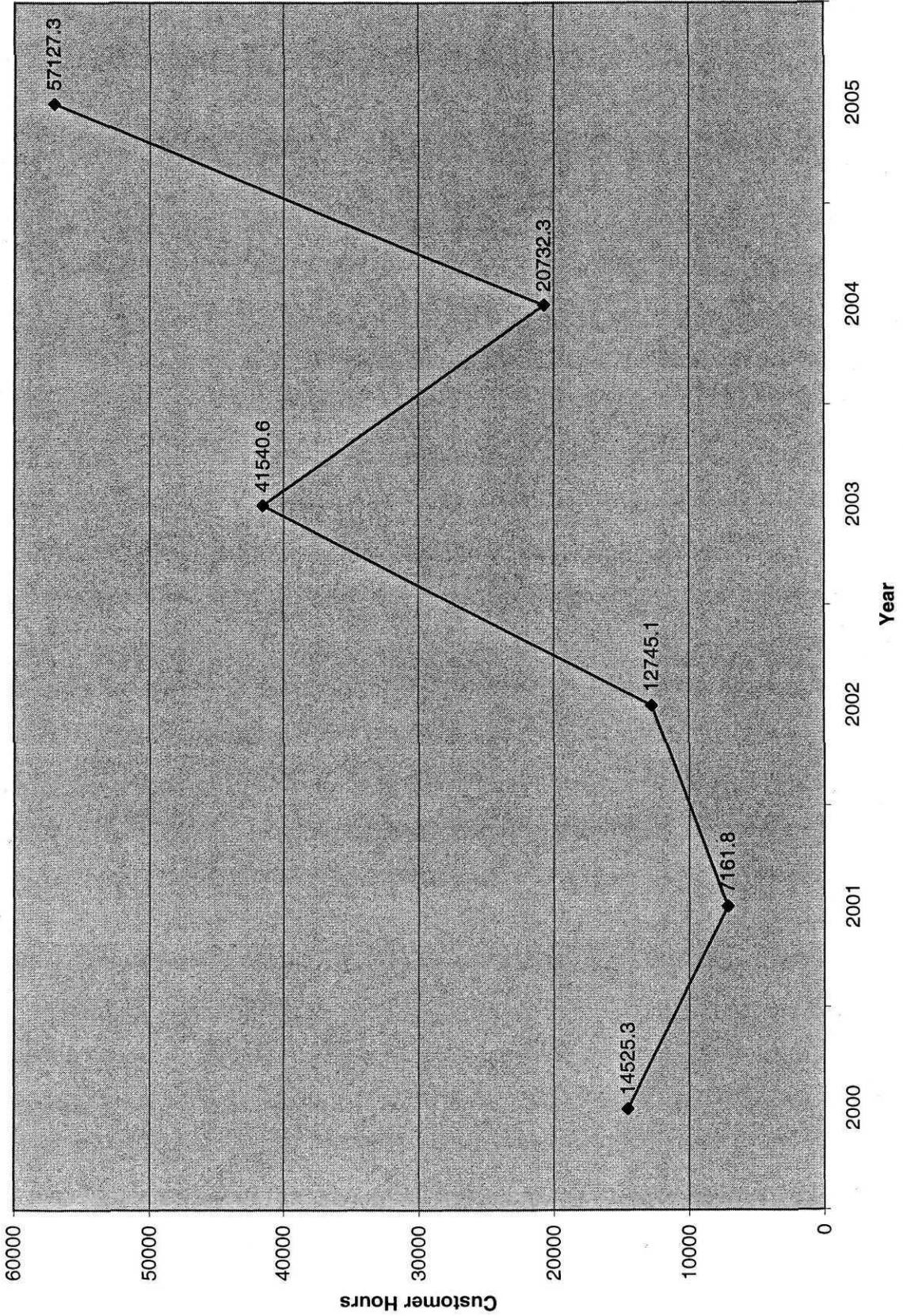
HELCO-610

**AUTO ACCIDENT
CUSTOMER AVERAGE INTERRUPTION DURATION (CAID)-NORMALIZED**



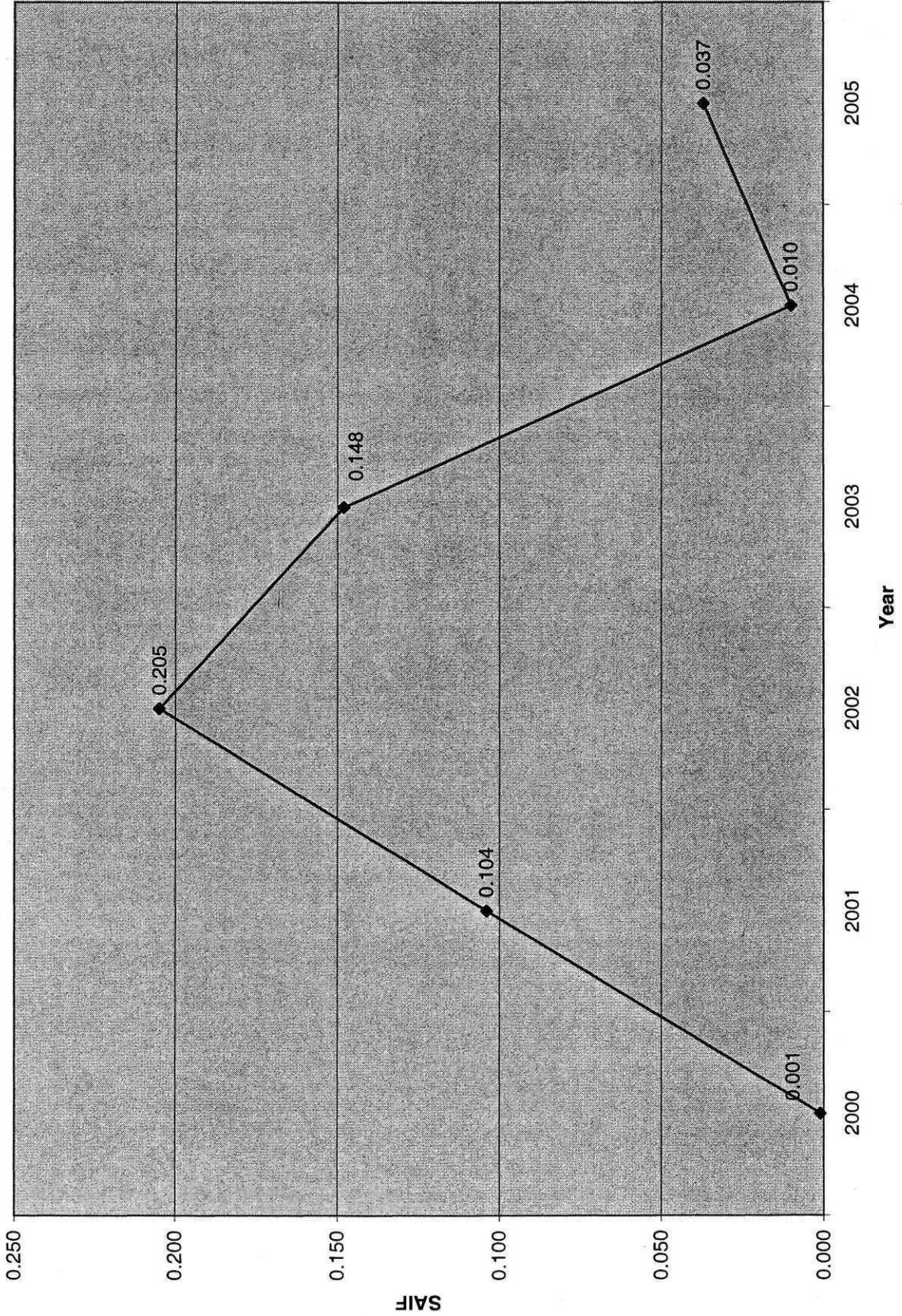
HELCO-610

**AUTO ACCIDENT
CUSTOMER HOURS-NORMALIZED**



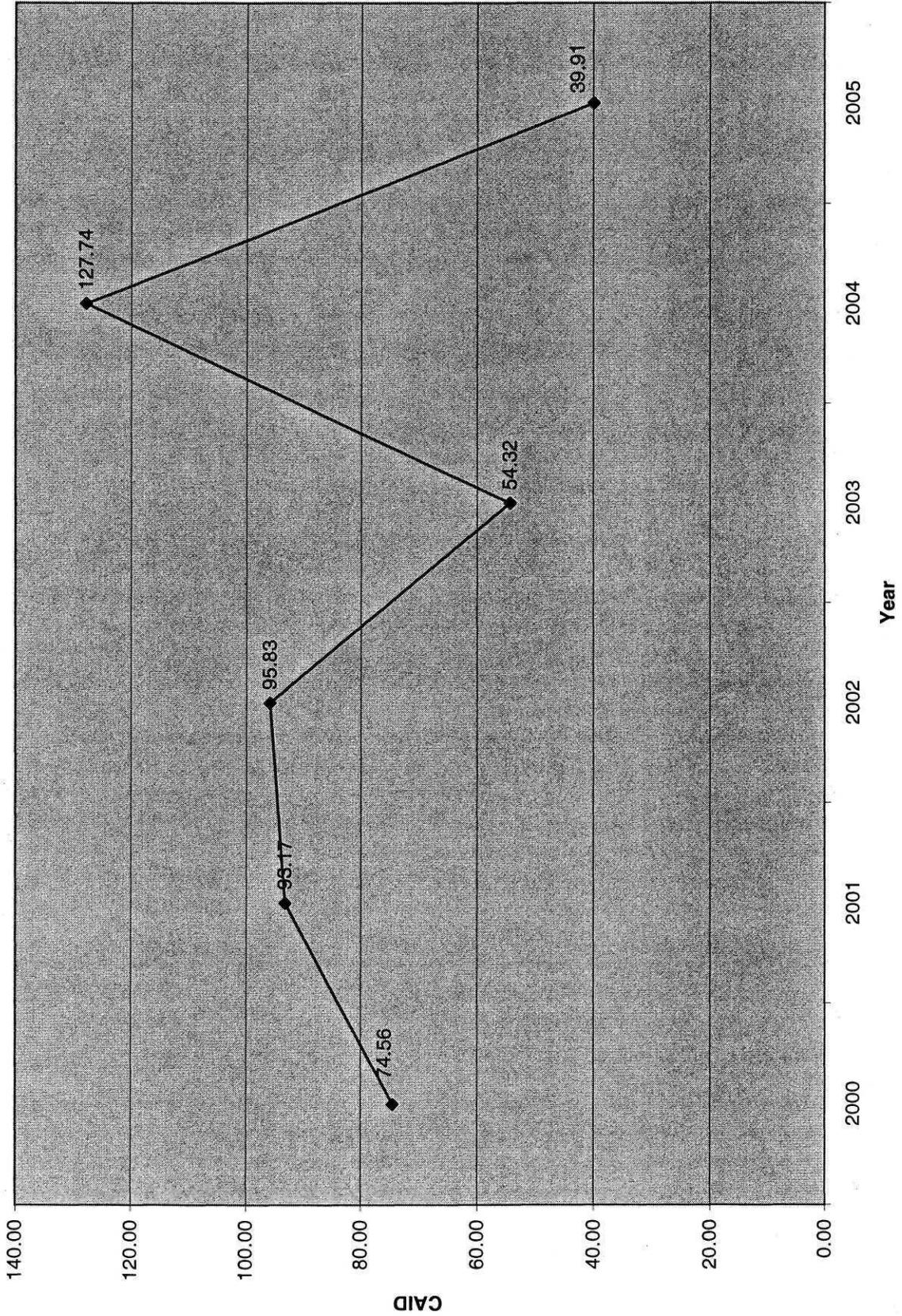
HELCO-610

LIGHTNING
SYSTEM AVERAGE INTERRUPTION FREQUENCY (SAIF)-NORMALIZED



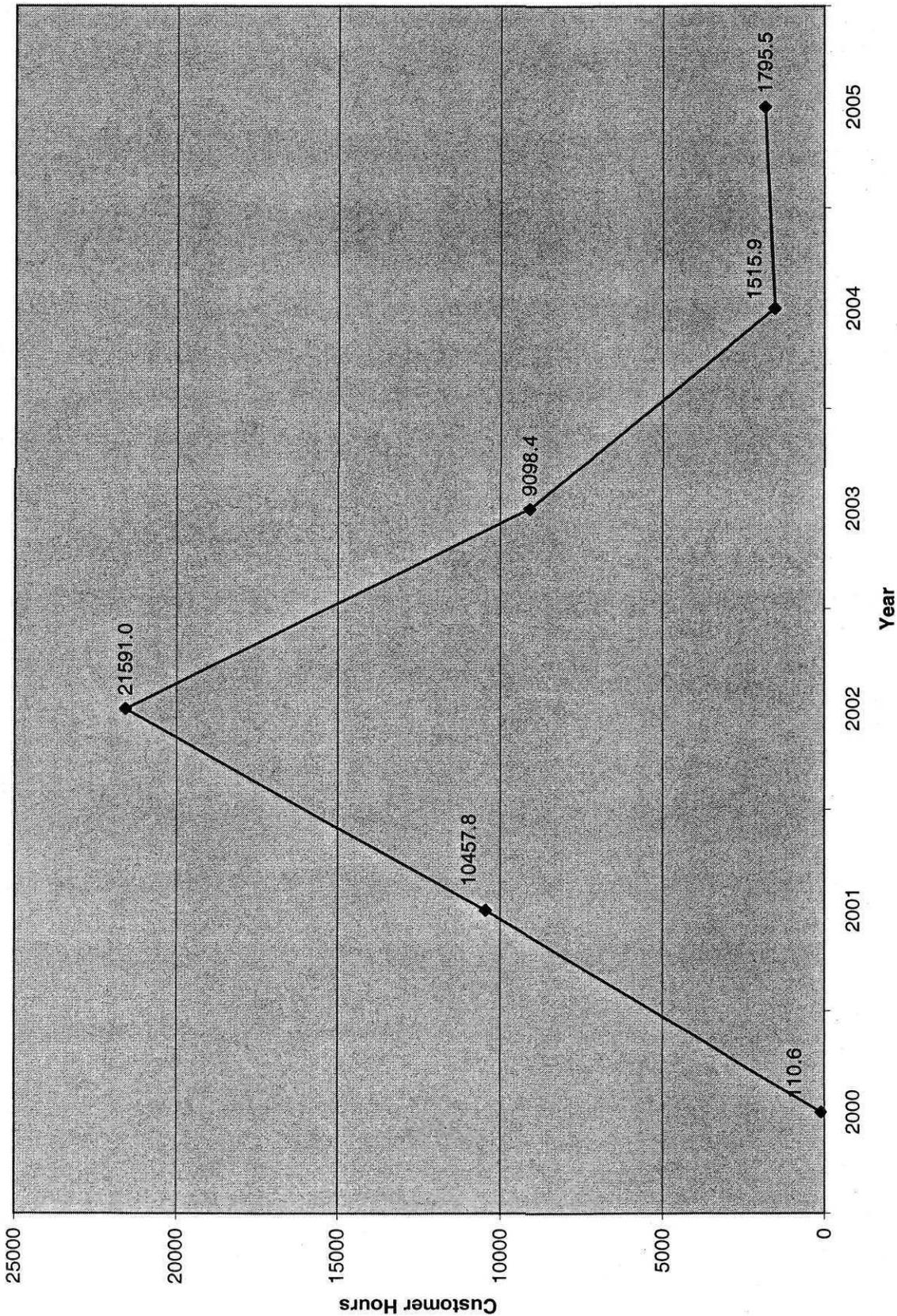
HELCO-610

LIGHTNING
CUSTOMER AVERAGE INTERRUPTION DURATION (CAID)-NORMALIZED



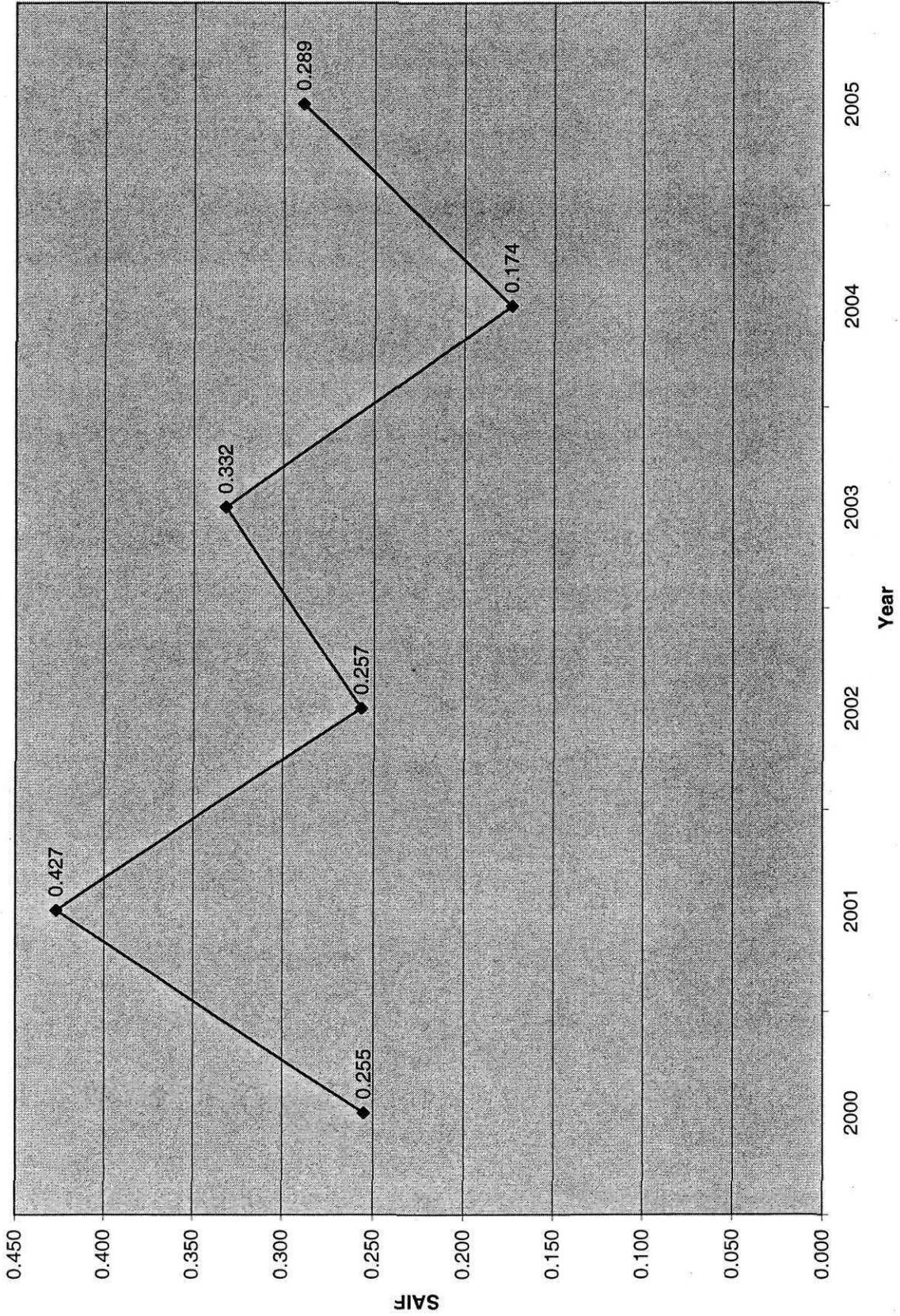
HELCO-610

**LIGHTNING
CUSTOMER HOURS OF INTERRUPTION-NORMALIZED**



HELCO-610

**TREES AND BRANCHES
SYSTEM AVERAGE INTERRUPTION FREQUENCY (SAIF)-NORMALIZED**



CA-IR-89

Ref: T-6, page 62, HELCO-608 & HELCO-619 (Overtime).

At page 62, T-6 states: "HELCO-619 provides the level of overtime worked by the entire HELCO Distribution Department work force for years 2000 to 2005. HELCO-608 presents the overtime hours worked in the Technical Division (HDC) and Hilo, Kona, and Waimea Construction and Maintenance Divisions (HDH, HDK and HDW) for years 2000 to 2005. It is clear that all of the listed divisions have sustained high levels of overtime since year 2002." Please provide the following:

- a. Please confirm that HELCO-608 does not reflect overtime hours for all Distribution department divisions. If this cannot be confirmed, please explain.
- b. Please confirm that HELCO-619 reflects overtime pay for all Distribution department divisions. If this cannot be confirmed, please explain.
- c. Referring to the response to part (a) of this information request, please revise HELCO-608 to reflect overtime hours worked by each division within the HELCO Distribution Department, so that the total overtime hours worked are comparable to the overtime pay set forth on HELCO-619.
- d. Referring to HELCO-619, the overtime dollars set forth on page 1 represent the sum of "penalty" and "overtime" amounts from page 2. Please explain and describe the form and nature of the compensation identified as "penalty."
- e. Referring to page 2 of HELCO-619, the "overtime" and "Staff ST" compensation categories are followed by "\$100K." Please explain and describe the reference to "\$100K" in the context of the amounts provided for each category.

HELCO Response:

- a. Yes, HELCO-608 does not reflect overtime hours for all Distribution Department divisions. HELCO provided the overtime hours related to the crews since these labor classes make up most of the overtime in the 2006 Test Year. In addition, HELCO-608 shows both O&M and Capital hours.
- b. Yes, HELCO-619 reflects overtime pay for all Distribution department divisions which is the total cost for O&M, Capital, and Clearings.
- c. The requested information is attached on page 3.

- d. The Penalty information is attached on page 4.
- e. The amounts provided are rounded to the nearest hundred thousand.

Line	A 2000 Recorded	B 2001 Recorded	C 2002 Recorded	D 2003 Recorded	E 2004 Recorded	F 2005 Recorded	G 06-06 Ytd Recorded
OverTime Hours							
H DA- ENABLR	0.5	0.5					
TC	85.5	5.5					
I		0			76.0		
Subtotal	86	6		29	76.0		
HDC- FS	4	0		21			
TCS	41	31	105.5	128.5		226.5	82.5
TECHCREW	2823.7	1813.6	3355.7	4078.7	4,261.2	7,375.4	4,360.4
BUOC	34.1	48.5	8		58.5	9.0	
Subtotal	2,902.8	1,893.1	3,469.2	4,228.2	4,319.7	7,610.9	4,442.9
HDH- FS	49.5	0		37	82.0		
TCS	669	676.03	746	589.9	423.0	222.3	588.2
CREW	15859.3	8306.3	11655.9	14627.1	14845.6	15,485.0	9766.1
Subtotal	16577.8	8982.33	12401.9	15254	15,350.6	15,707.3	10,364.3
HDK- FS							
TCS	772.4	1032.3	1415.8	1088.5	1273.2	662.5	383
CREW	6069.8	7924.6	11757.8	10067.1	11492.3	8,377.2	5022
CUSME	601.8						
INSP	75.8	141.1	177.8	192.7	268.7	65.8	85.3
WHSE	505.1	481.2		491.3	424.4	514.7	320.9
Subtotal	8024.9	9,579.2	13,351.4	11,839.6	13,458.6	9,620.2	5811.2
HDR- TCS						89.8	16
BUTC	1352.4	852.5	957.3	1122.2	2179.6	2,143.7	1274.8
INSP	178	140.3	213.5	217.3	283.5	156.3	51
SR INSP	0	0	0	0	0	52.5	73
DMAP	7.5	5.0	5.5	0	0.5		
Subtotal	1,537.9	997.8	1,176.3	1,339.5	2,463.6	2,444.3	1414.8
HDS- TCS	146	130	52.0	73	117	65.0	2
DWAREH	330.8	283.1	332.7	475.9	538.6	729.4	210.3
BUTC	8	1	298.0	713.3	761.6	652.1	347
Subtotal	484.8	414.1	682.7	1,262.2	1,417.2	1,446.5	559.3
HDW TCS	386	510.9	698.0	667	545.3	468.0	232.3
CREW	7631	5197.9	6264.5	6386.5	6654.5	4,869.5	2,715.4
INSP	152.5	330.6	441	236	519.8	74.5	125
CUSME	668.7	0	0	0	0	0	0
WHSE	694.1	812.1	1641.4	576.6	520.1	624.5	336.5
Subtotal	9,532.3	6,851.5	9,044.9	7,846.1	8,239.7	6,036.5	3,409.2
TOTAL PER 1660 RPT HOURS/HELCO-608/EXCLUDING PENALTY HOURS							
	39,146.5	28,724.0	40,126.4	41,798.6	45,325.4	42,865.7	26,001.7
PAYROLL RECAP REPORT/HELCO-619/OVERTIME DOLLARS WITH PENALTY							
	\$1,677,298.97	\$1,320,764.11	\$1,850,437.37	\$1,968,578.00	\$2,235,031.71	\$2,202,832.83	\$1,323,607.94

Penalty Codes

Earning Code 020 - Cancel OT Penalty 2hr Extra Straight Time: This code is used to pay an employee extra straight time when a notice to cancel scheduled overtime is not provided within the required timeframe. Record 2 units. Each unit is paid at the employee's current straight time pay rate. This earning code may not be recorded with the same start/stop time that a higher duty assignment is recorded on. Apply this earning code on the day overtime was canceled.

Earning Code 021 - Penalty @ .5 x: This code is used to pay an employee:

- the penalty for overtime worked between midnight and 0600 when using overtime work codes that pay time and one-half instead of double time. The units should be recorded for only the hours that the work code **will NOT** automatically pay at the double time rate. After 4 hours (C1) or 2 hours (TX) the work code will automatically pay the double time rate.
- the penalty for late lunch.
- the penalty for late or lack of notice of either scheduled overtime or change of work schedule.

This penalty may not be used on pre-shift work (4 hours or less before start of roster) and when the overtime work code C2 is used as Doubletime is automatically paid. Unit is recorded in hours/minutes. Each unit is paid at the rate of .5 x the employee's applicable rate.

Earning Code 023 - Penalty @ 1 x: This code is used to pay an employee:

- the penalty for late or lack of notice of either scheduled overtime or change of work schedule.
- an additional 1x the rate during the normal roster work hours when the employee works 4 hours (5/8) or 5 hours (4/10) or more on a callout into a normal roster work day.

Unit is recorded in hours/minutes. Each unit is paid at the rate of 1 x the employee's applicable rate.

Earning Code 024 - Meal Time Penalty @ 1.5 x: This code is used to pay an employee the allowance for the time to eat meals earned during overtime periods. This code may only be used when the employee is taking the meal at the end of the shift and has gone home for the day. If the meal time is taken between recorded start and stop hours, do not add this code. The meal time penalty will be paid as productive time worked through the start and stop times and recorded work codes. Unit is recorded in hours/minutes. Each unit is paid at the rate of 1.5 x the employee's applicable rate.

Earning Code 025 - Meal Time Penalty @ 2 x: Same as above except each unit is paid at the rate of 2.0 x the employee's applicable rate.

CA-IR-90

Ref: T-6, page 62, HELCO-612, HELCO-WP-612 & HELCO-619 (T&D Contract Labor).

At page 62, T-6 states: “HELCO-619 presents the expenditures for use of contractors for pole and line construction and substation maintenance for the years 2000 to 2005, and the year-to-date expenditures for 2006. It shows that expenditures for contract services have increased significantly in years 2002 to 2005, and the year-to-date expenditures are on track to meet or exceed the 2006 test year estimate... Thus, the expenditures for contract services reflect the labor and equipment costs.” Please provide the following:

- a. Although the referenced testimony and the title for HELCO-619 indicates that the contractor expenditures encompass both construction and substation maintenance, page 2 of HELCO-619 appears to indicate that the contractor costs are associated with construction activity. Please explain this apparent inconsistency and correct HELCO-619, page 2, as necessary.
- b. Please confirm that the vendor amounts shown on HELCO-619, page 2, are only for linemen type work. If this cannot be confirmed, please explain.
- c. HELCO-612 presents a historical comparison of contract vegetation costs for each year from 2000-2005 (actual) and 2006 test year (forecast). The contract vegetation costs for 2000 and 2001 alone exceed the total contract services amounts set forth on HELCO-619, page 2, for those same years. Please confirm that the vendor amounts presented on HELCO-619 exclude vegetation management contractor costs. If this cannot be confirmed, please explain.
- d. Please revise HELCO-619, page 2, to show all Distribution contract service amounts (separately listing expense and capital accounts) by contractor. If possible, please identify the nature of the work conducted by each contractor (e.g., vegetation maintenance, line construction, pole replacement, trouble call support, etc.).
- e. Referring to the response to part (d) of this information request, please break down the contract vendor services between labor and equipment costs. If the requested information is not available, please explain and describe what information might exist to provide such data.

HELCO Response:

- a. In HELCO-619, the contractor cost provided is for both line construction and substation work for years 2000-2006. Contracting of substation work began recently in 2006.
- b. The vendor amounts shown on HELCO-619, page 2 includes linemen type work and substation electrician type work.
- c. Yes, HELCO-619 excludes vegetation management costs.

- d. The information is not available in the form requested. The reports that are generated do not provide the dollars for contract services by vendor code. In addition, we utilize approximately two hundred different vendors for our contract services. In response to CA-IR-97, part a, page 3, HELCO is providing the break out between O&M and Capital for the six vendors listed in HELCO-619.
- e. This information request is not available since all vendor invoices are not standardized with a breakdown of labor and equipment costs.

CA-IR-91

Ref: T-6, pages 75-76, HELCO-604 & HELCO-WP-606 (T&D Inventory).

At page 76 witness T-6 generally identifies the components of the \$457,000 increase in T&D materials inventory in 2006. Please provide the following:

- a. Referring to pages 3 and 5 of HELCO-WP-606, please provide general ledger information supporting the actual T&D inventory monthly balances for calendar years 2004 and 2005 set forth thereon.
- b. At page 76, HELCO T-6 indicates that the stocking levels for underground materials and poles (35', 40' and 45') were increased to improve availability of materials for projects and emergencies.
 1. Has HELCO actually experienced shortages or chronic deficiencies in the available inventory of underground materials and/or poles?
 2. If so, please provide a detailed description of those shortages and the impact on HELCO's ability to timely meet the requirements of ongoing projects or emergencies.
- c. Please provide additional support for the determination that the stocking level for underground materials should be increased by \$135,000.
- d. Please provide additional support for the determination that the stocking level for 35', 40' and 45' poles should be increased by \$95,000.

HELCO Response:

- a. The requested general ledger reconciliation is attached on page 3 and 4. The general ledger balances include both Production and Distribution inventory.
- b. No.
- c. HELCO's inventory system is not set up to track items on a 13 month average basis. The \$135,000 amount was an estimate based on increases in the underground materials inventory of padmount switchgear and splicing supplies. As of August 2006, a comparison of the inventory value at April 2005 versus April 2006 was done to substantiate the original estimate. These spares were added to respond to emergency replacements and to accommodate customer installations. Lead times for pad-mounted switchgear are 19 weeks

making it necessary to stock these spares or encounter outages or long delays for some customer installations. In addition, inventory for underground terminations and splices increased approximately \$106,000 to stock to respond to emergency repairs and accommodate customer installations. Lead times for these splices and terminations are approximately 17 weeks.

- d. HELCO's inventory system is not set up to track items on a 13 month average basis. The \$95,000 amount was an estimate based on increases in concrete and wooden poles. As of August 2006, a comparison of the inventory value at May 2005 versus May 2006 was done to substantiate the original estimate. In the comparison period, HELCO has adopted the use of concrete poles for distribution facilities. Stocking levels were increased approximately \$57,000 to stock primarily concrete distribution poles. An increase of \$47,000 to the stock of 35', 40 and 45 foot wooden poles was also made.

Hawaii Electric Light Co., Inc.
 MATERIALS INVENTORY - 2004

	January	February	March	April	May	June	July	August	Sept	Oct	Nov	Dec
MSR179B	2,536,253.00	2,611,985.00	2,583,590.00	2,624,422.00	2,596,333.00	2,543,666.00	2,604,931.00	2,681,296.00	2,579,515.00	2,511,132.00	2,571,892.00	2,874,722.00
Stationary	11,843.24	11,843.24	11,843.24	11,843.24	11,843.24	-	-	530.10				
Mat'l Trans TSMR (DEF) GL=15400008												
unreconciled	(3,816.73)	(2,438.20)	(2,592.86)	(2,593.42)	(2,593.45)	(0.06)	-	0.79	(8.76)	87.90	87.70	87.63
GL Balance	2,544,279.51	2,621,390.04	2,592,840.38	2,633,671.82	2,605,582.79	2,543,665.94	2,604,931.00	2,681,226.89	2,579,506.24	2,511,219.90	2,571,979.70	2,874,809.63
	2/17	4/28	4/28	5/13	6/15	7/16	8/25	9/14	10/22	11/5	12/8	1/7/2005

Hawaii Electric Light Co., Inc.
MATERIALS INVENTORY - 2005

	January	February	March	April	May	June	July	August	Sept	Oct	Nov	Dec
MSR179B	2,969,150.00	2,949,679.00	3,007,266.00	2,976,918.00	2,993,583.00	2,973,250.00	2,883,514.00	2,962,170.00	3,054,252.00	3,189,209.00	3,356,802.00	3,507,758.00
Stationary Mat'l Trans TSFR (DEF) GL=15400008										30,767.62	1,319.99	
unreconciled	348.85	65.54	100.49	(9.14)	836.06	(9.15)	(8.44)	(8.91)	(8.40)	(9.03)	(8.26)	(8.85)
GL Balance	2,969,498.85	2,949,744.54	3,007,366.49	2,976,908.86	2,994,419.06	2,973,240.85	2,883,505.56	2,962,161.09	3,054,243.60	3,219,967.59	3,358,113.73	3,507,749.15
	6/21/05	6/21/05	6/21/05	6/21/05	6/21/05	7/28/05	8/9/05	9/14/05	10/20/05	11/8/05	12/22/05	1/14/06

CA-IR-92

Ref: T-6, page 19 (T&D Tree Trimming).

The referenced testimony indicates that HELCO supplements its workforce with contractors to expedite power restoration. Please provide the following:

- a. Please provide the actual tree/brush trimming expense, by NARUC account, for calendar years 2001-2005 and the 2006 test year forecast.
- b. Referring to the response to part (a) of this information request, please provide the amounts included therein for tree trimming and vegetation management contractors.
- c. If the information requested in parts (a) and (b) of this information request are contained in the exhibits or workpapers previously provided by HELCO, please provide a pinpoint reference to the responsive data.

HELCO Response:

- a. Year 2001 Account 571.00 Activity 355 actual expense was \$264,745.39.
Year 2001 Account 593.00 Activity 494 actual expense was \$919,573.65.
Year 2002 Account 571.00 Activity 355 actual expense was \$238,522.38.
Year 2002 Account 593.00 Activity 494 actual expense was \$1,302,863.26.
Year 2003 Account 571.00 Activity 355 actual expense was \$184,229.60.
Year 2003 Account 593.00 Activity 494 actual expense was \$890,174.89.
Year 2004 Account 571.00 Activity 355 actual expense was \$284,056.74.
Year 2004 Account 593.00 Activity 494 actual expense was \$894,557.02.
Year 2005 Account 571.00 Activity 355 actual expense was \$177,248.27.
Year 2005 Actual 593.00 Activity 494 actual expense was \$1,554,131.99.
The 2006 test year forecast was provided in HELCO-WP-612, page 2 of 2.
- b. The information was provided in HELCO-612, page 1 of 1 for expense element 501 contract services.
- c. The reference was provided in response to part b.

CA-IR-93

Ref: T-6, page 61, HELCO-611 & HELCO-619 (T&D Staffing).

At page 61, the referenced testimony describes how HELCO determines the appropriate staffing level and contractor utilization, as follows: “HELCO monitors parameters such as the level of overtime being worked by HELCO employees, extent of use of contractors, projected work requirements in future years, HELCO employee retirement projections, economic outlook, response to trouble and emergencies, and the skill level of the HELCO work force. Based on those parameters HELCO determines staffing levels to increase or decrease available HELCO labor resources.” Please provide the following:

- a. How did historical overtime levels impact HELCO’s determination of the staffing levels included in the 2006 test year Distribution forecast? Please explain and provide copies of documentation (e.g., resource leveling reports) relied upon in preparing said forecast.
- b. How did the use of contractors impact HELCO’s determination of the staffing levels included in the 2006 test year Distribution forecast? Please explain and provide copies of documentation relied upon in preparing said forecast.
- c. How did work requirements impact HELCO’s determination of the staffing levels included in the 2006 test year Distribution forecast? Please explain and provide copies of documentation (e.g., resource leveling reports) relied upon in preparing said forecast.
 1. Referring to subpart (c) above, please identify and define the term “work requirements,” as used in this context.
 2. Please provide Distribution work requirements for calendar years 2002-2005 and forecast for 2006.
- d. How did employee retirement projections impact HELCO’s determination of the staffing levels included in the 2006 test year Distribution forecast? Please explain and provide copies of documentation (e.g., resource leveling reports) relied upon in preparing said forecast.
 1. Please provide projections of Distribution employee retirements, as considered in determining actual Distribution staffing levels in calendar years 2002-2005.
 2. Please provide projections of Distribution employee retirements, as considered in determining the staff level forecast for 2006.
- e. How did the economic outlook impact HELCO’s determination of the staffing levels included in the 2006 test year Distribution forecast? Please explain and provide copies of documentation relied upon in preparing said forecast.
 1. Please provide economic outlook projections, as considered in determining actual Distribution staffing levels in calendar years 2002-2005.

2. Please provide economic outlook projections, as considered in determining the Distribution staff level forecast for 2006.
- f. How did trouble and emergency response impact HELCO's determination of the staffing levels included in the 2006 test year Distribution forecast? Please explain and provide copies of documentation relied upon in preparing said forecast.
1. Please provide trouble and emergency response data, as considered in determining actual Distribution staffing levels in calendar years 2002-2005.
 2. Please provide trouble and emergency response projections, as considered in determining the Distribution staff level forecast for 2006.
- g. How did the skill level of HELCO's employees impact HELCO's determination of the staffing levels included in the 2006 test year Distribution forecast? Please explain and provide copies of documentation relied upon in preparing said forecast.
1. Please provide data regarding the skill level of HELCO's employees, as considered in determining actual Distribution staffing levels in calendar years 2002-2005.
 2. Please provide data projections regarding the skill level of HELCO's employees, as considered in determining the Distribution staff level forecast for 2006.

HELCO Response:

- a. HELCO provided historical overtime levels in exhibit HELCO-608. These historical overtime levels were reviewed along with historical staffing counts in exhibit HELCO-611. Review of the historical overtime data for the HDC-Techcrew, HDH-crew (Hilo), HDK-crew (Kona) and HDW (Waimea) indicated a rising trend in overtime percentages from year 2000 to 2004. In general these increases in overtime percentages corresponded to decreases in staffing levels in the respective divisions. In 2004 overtime percentages ranged from 17% in HDC-Techcrew to 49% in HDK-crew.

For HDH-crew the overtime percentage dropped slightly from 36% in 2004 to 35% in 2005 while staffing increased from 27 to 30. For HDK-crew overtime percentage dropped from 49% in 2004 to 35% in 2005 while staffing increased from 20 to 22. For HDW-crew overtime percentage decreased from 35% in 2004 to 29% in 2005 while staffing increased

from 13 to 14. Though decreases were experienced in these work groups, overtime percentages still remained high. One of the reasons for the staffing level increase of 4 for HDH-crew, increase of 5 in HDK-crew and 2 in HDW-crew in the 2006 test year was to have better control over the high overtime levels.

For the HDC-Techcrew there was an increase in overtime percentage from 17% in 2004 to 28% in 2005 while staffing increased from 17 in 2004 to 23 in 2005. This increase in overtime percentage in 2005 is attributed to the establishment of substation maintenance program goals in 2004 as described in HELCO T-6 page 40-47. One of the reasons for the staffing increase of 2 in HDC-techcrew in the 2006 test year was to have better control of the high overtime level experienced in 2004. The resource leveling report was supplied as a response to CA-IR-1, HELCO T-6, part b, pages 148-185.

- b. HELCO provided historical contractor services data in HELCO-619. This historical contractor services data was reviewed along with historical staffing counts and historical overtime data to assist in determining staffing levels. HELCO has sustained high levels of overtime since year 2000. HELCO has increased its Distribution Department staffing count from 91 in 2003 to 109 as of March 2006. Despite the sustained high levels of overtime and increase in staffing, HELCO has significantly increased expenditures for contract services related to line construction and substation work as shown in HELCO-619.

As described in HELCO T-6, page 61, the combination of HELCO employees and contract labor can best accommodate the variability in work demands. Much of the recent work demands since 2002 are related to the new customer growth experienced on the Big Island. This increase in work demand was met with contract labor. Work demands have been sustained at this high level since 2002 and increases to 2006 test year staffing levels are

intended to help meet work demands.

- c. HELCO reviewed documents such as the 5 year capital budget forecast, resource leveling report and HELCO's Forecast of Annual Average Customers to determine work requirements related to capital projects. The HELCO Forecast of Annual Average Customers is provided in HELCO-202, page 11. HELCO's 2006-2010 five year Capital Budget was filed with the Commission and the Consumer Advocate on 12/30/2005. The resource leveling report was supplied as a response to CA-IR-1, HELCO T-6, part b, pages 148-185. HELCO also developed and reviewed the substation maintenance program as described in HELCO T-6 pages 40-47. HELCO developed and reviewed trouble inspector work requirements as described in HELCO T-6, pages 64-66. HELCO developed and reviewed the T&D facility inspection program as described in HELCO T-6, pages 47-52.
 1. Work requirements are the tasks required of the HELCO Distribution Department to operate, maintain or rebuild existing facilities to serve existing customers and the tasks required to build new facilities and/or upgrade existing facilities to serve new customers.
 2. Work requirements for HELCO Distribution Department 2006 O&M tasks are described in HELCO T-6. The 2006 work requirements for the HELCO Distribution Department to build new facilities or rebuild existing facilities are provided in the 2006 capital budget forecast. Plant addition records for years 2002 to 2005 provide capital work requirements during those years. Recorded O&M expenditures for 2002 to 2005 provide work requirements for those years.
- d. Retirement projections are used to determine the projected loss of experienced employees due to retirements. As described in HELCO T-6, page 61, journeymen linemen and

electricians require approximately five years of training and work experience to become proficient. Retirement projections are used to develop the hiring strategy to replace the lost expertise. The 2006 staffing forecast incorporates replacing employees as they retire. The 2006 test year staffing forecast does not incorporate a strategy of increasing staffing in 2006 in order to accommodate projected retirements in future years. To replace retired personnel HELCO is recruiting both fully qualified journeymen and entry level employees who will require approximately five years of training.

1. Projection of Distribution employee retirements that was used for 2004 and 2005 is provided on page 8 of this response.
2. Projection of Distribution employee retirements that was used for the 2006 test year is provided on page 9 of this response.

The requested information on pages 8 and 9 of this response is confidential and will be provided pursuant to Protective Order No. 22593, dated June 30, 2006.

- e. The economic outlook related to new customer connections was reviewed to assist in determining Distribution Department staffing. The Forecast of Annual Average Customers is reviewed to provide an indication of the expected work requirements for connecting new customers. This forecast is provided in HELCO-202, page 11 of 11. The process for developing the new customer load forecast is described in HELCO-203.

Review of the new customer load forecast indicated that the high level of new customer growth experienced in 2003-2005 is expected to continue for several more years. This need to continue to connect new customers was one of the factors that led to increasing the staffing level in the 2006 test year.

1. The process to develop the load forecast is described in HELCO-203. The process

- incorporates a review of economic factors to determine the Forecast of Annual Average Customers which the Distribution department uses to help develop the staffing forecast.
2. See HELCO-202, page 11. The process to develop the load forecast is described in HELCO-203. The process incorporates a review of economic factors to determine the Forecast of Annual Average Customers which the Distribution department uses to help develop the staffing forecast.
- f. HELCO T-6, page 17 describes how lower staffing levels have contributed to longer outage durations during storms. HELCO T-6, page 19 also describes how increases in staffing since 2003 helped to improve response to storms. HELCO T-6, pages 64-66 describes trouble inspector duties and how an addition of 4 trouble inspectors is intended to improve response to trouble and emergencies.
1. Reliability data for leading causes of interruption for years 2000 to 2005 are provided in HELCO-610. Service reliability reports are supplied to the Commission annually.
 2. Reliability data for leading causes of interruption for years 2000 to 2005 are provided in HELCO-610. Service reliability reports are supplied to the Commission annually. See also the response to CA-IR-1, HELCO T-6, part f - Trouble inspector callouts for 2005.
- g. As discussed in HELCO T-6, page 61, entry level employees require approximately 5 years to become a journeyman linemen and electrician. Replacement of a fully qualified journeyman with an entry level employee results in a lowering of productivity. Not only are the new entry level employees less productive, but also the remaining journey level employees become less productive because they need to slow down to train the new employees and to monitor their work for safety. This lower productivity needs to be considered when determining staffing requirements.

1. A staffing projection incorporating retirements and progression of entry level replacements is provided on pages 10 to 16 of this response. The requested information is confidential and will be provided pursuant to Protective Order No. 22593, dated June 30, 2006.
2. The monthly employee count for 2006 that shows the mixture skill level in the work groups is provided in CA-IR-96, part b.

Confidential Information Deleted
Pursuant to Protective Order No. 22593

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CA-IR-94

Ref: T-6, page 62, HELCO-608 & HELCO-619 (T&D Overtime).

At page 62, T-6 indicates that “HELCO-619 provides the level of overtime worked by the entire HELCO Distribution Department work force for years 2000 to 2005,” while “HELCO-608 presents the overtime hours worked” in certain Distribution divisions during this same time frame. Please provide the following:

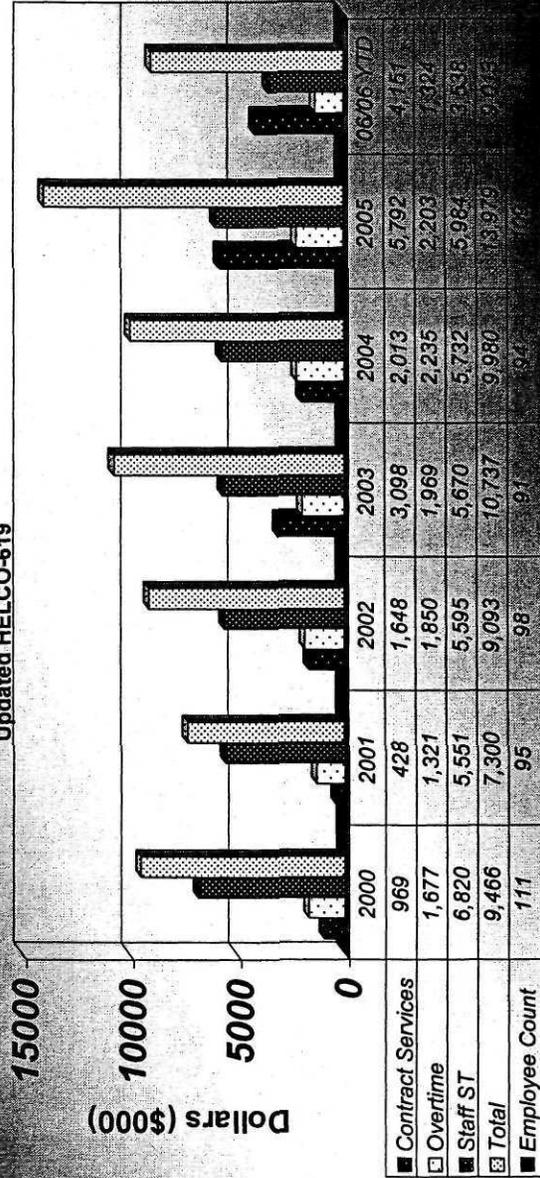
- a. Please supplement or update HELCO-619 to replace the “03/06 ytd” chart and underlying data with the 2006 rate case test year forecast values (i.e., contract services, overtime, straight time, total and employee count). If all data elements are not available from the 2006 test year forecast, please explain why specific data cannot be determined from said forecast and provide the forecast data that is available.
- b. Please supplement or update HELCO-608 to replace the “03/06 ytd” data with 2006 rate case test year forecast data. If all data elements are not available, please explain why the specific data cannot be determined from said forecast and provide the data that is available.

HELCO Response:

- a. See response to CA-IR-86, part b. We do not budget the capital contract services costs and only the O&M contract services is budgeted. Therefore, we can not update this report with the 2006 Test Year numbers but instead have provided the 06/06 ytd data attached.
- b. The 2006 rate case test year forecast and the 06/06 ytd data are provided in response to CA-IR-86.

**Distribution Department
 Total Labor Cost (\$000)
 (Capital & O&M)**

Updated: HELCO-619



TOTAL LABOR COST
O&M and Capital
BACKUP DATA

	2000	2001	2002	2003	2004	2005	06/06 YTD
See below							
Contract Services	969000	427,631	1,648,135	3,098,171	2,013,471	5,791,614	4,150,622
Penalty	70922.13	64,060	72,476	100,806	147,320	204,678	113,728
Payroll Recap Dist. Dept.	1606376.84	1,256,704	1,777,961	1,867,772	2,087,711	1,998,155	1,209,880
Payroll Recap Dist. Dept.	6819955.58	5,551,205	5,595,343	5,670,114	5,732,372	5,984,089	3,538,286
Total	9466254.55	7,299,600	9,093,915	10,736,863	9,980,875	13,978,536	9,012,516
Employee Count	111	95	98	91	94	109	112
Contractor Costs:							
ACA Services							16,437
Electrical Services							16,857
PAR		0	0	0	0	3,513,093	3,353,935
Mauna Kea		427,631	1,648,135	2,924,777	1,240,336	1,099,212	396,779
Telecable		-	-	-	491,327	1,179,309	366,613
Asplundh		-	-	173,394	281,808	-	-
Total	427,631	1,648,135	3,098,171	5,791,614	2,013,471	5,791,614	4,150,622
Total Overtime	1677298.97	1320764.11	1850437.37	1968578	2235031.71	2202832.83	1323607.94

Note: as of 11/04 line construction

CA-IR-95

Ref: T-6, page 62, HELCO-608 & HELCO-619 (T&D Overtime).

At page 62, HELCO T-6 indicates that "HELCO-619 provides the level of overtime worked by the entire HELCO Distribution Department work force for years 2000 to 2005," while "HELCO-608 presents the overtime hours worked" in certain Distribution divisions during this same time frame. Please provide the following:

- a. Does the 2006 test year T&D forecast recognize the reduced overtime pay and lower contract work that is expected as a direct result of the higher staffing forecast?
 1. If not, explain why not.
 2. If yes, please explain how the reduction in overtime and contract work was quantified and recognized in the forecast. [Please provide a pinpoint reference to any workpapers that have already been provided containing the requested information.]
- b. Please explain and provide calculations showing how the increase in Distribution employee levels from 2004 into 2005 and then to 2006 test year forecast was translated into a reduction in:
 1. overtime pay; and
 2. use of contractors.

HELCO Response:

- a. Please refer to the response provided in CA-IR-86.
- b. Please refer to the response provided in CA-IR-86.

CA-IR-96

Ref: T-6, HELCO-611 (Distribution Staffing).

HELCO-611 compares historical Distribution Department employee levels with the 2006 Budget and 2006 test year forecast levels. Please provide the following:

- a. Do the employee levels during the years 2000-2005 represent average or year-end employee counts?
 1. If average, please provide the actual monthly employee counts used to determine the annual averages.
 2. If the levels represent a specific point in time, please identify the valuation months used.
- b. Please update HELCO-611 to include the actual 2006 monthly employee data.

HELCO Response:

- a. The employee levels during the year 2000-2005 represents the year-end employee counts.
 1. This is not applicable.
 2. The year-end employee count was used.
- b. The requested information is attached as pages 2 to 9 to this response.

**Hawaii Electric Light Company
Administration Employee Count**

Position	RA	Jan	Feb	Mar	Apr	May	Jun	2006 Budget	2006 Bud Adj	2006 Test Year	6-Jun 2006 TY Diff
		Total	Total	Total	Total	Total	Total				
Administration -	HDA										
Manager		1	1	1	1	1	1	1	0	1	0
System Forester		1	1	1	1	1	1	1	0	1	0
Distribution Administrator		1	1	1	1	1	1	1	0	1	0
Summer Hire		0	0	0	0	0	1	0	0	0	(1)
Staff Engineer		2	2	2	2	2	2	1	0	1	(1)
		5	5	5	5	5	6	4	0	4	(2)

Hawaii Electric Light Company

Technical Division Employee Count

Position	RA	Jan	Feb	Mar	Apr	May	Jun	Budget	2006 Bud Adj	2006 Test Year	6-Jun 2006 TY Diff
		Total	Total	Total	Total	Total	Total				
Technical - Superintendent, Technical	HDC	1	1	1	1	1	1	1	0	1	0
Assistant Superintendent, Technical - Elect		1	1	1	1	1	1	1	0	1	0
Assistant Superintendent, Technical - Subst		1	1	1	1	1	1	1	0	1	0
Working Foreman		5	5	5	5	5	5	5	0	5	0
Electrician		7	7	7	7	7	7	7	0	7	0
Apprentice Electrician		2	3	3	3	3	3	1	0	1	(2)
Technician - Relayman		1	1	1	1	0	0	1	0	1	1
Lineman		1	1	1	1	1	1	1	0	1	0
Senior Helper		1	0	0	0	0	0	1	0	1	1
Helper		3	3	3	3	4	4	5	0	5	1
Material Coordinator/Clerk		0	0	0	0	0	0	1	0	1	1
		23	23	23	23	23	23	25	0	25	2

Hawaii Electric Light Company												
Hilo C&M Employee Count												
		Jan	Feb	Mar	Apr	May	Jun		Budget	Bud Adj	Test Year	6-Jun 2006 TY Diff
		2006	2006	2006	2006	2006	2006		2006	2006	2006	2006
Position	RA	Total										
Construction & Maintenance -	HDH											
Superintendent, C&M		1	1	1	1	1	1	1	1	0	1	0
Assistant Superintendent, C&M		2	2	2	2	2	2	2	2	0	2	0
Working Foreman		3	3	3	3	3	3	3	4	0	4	1
Lineman		12	12	12	12	13	13	13	13	0	13	0
Apprentice		3	8	8	8	8	8	3	3	0	3	(5)
Troubleman-Inspector		2	2	2	2	2	2	4	4	0	4	2
Serviceman		2	2	2	2	2	2	2	2	0	2	0
Senior Helpers		5	0	0	0	0	1	5	0	0	5	4
Helpers		0	0	0	0	0	0	0	0	0	0	0
		30	30	30	30	31	32	34	0	0	34	2

Hawaii Electric Light Company												
Kona C&M Employee Count												
		Jan	Feb	Mar	Apr	May	Jun				2006	Jun-06
		2006	2006	2006	2006	2006	2006				2006	2006 TY
		Total	Total	Total	Total	Total	Total	Budget	Bud Adj	Test Year	Diff	
Position	RA											
Construction & Maintenance -	HDK											
Superintendent, C&M		0	0	0	0	0	0	1	0	1	1	1
Assistant Superintendent, C&M		2	2	2	2	2	2	2	0	2	0	0
Administrative Assistant		0	0	0	1	1	1	0	1	1	0	0
Staff Engineer		0	0	0	0	0	0	1	0	1	1	1
Working Foreman		3	3	3	3	3	3	3	0	3	0	0
Lineman		5	5	5	5	4	4	5	(1)	4	0	0
Apprentice		3	3	4	4	4	4	3	0	3	(1)	(1)
Troubleman-Inspector		2	2	2	2	2	2	4	0	4	2	2
Serviceman		1	1	1	1	1	1	1	0	1	0	0
Senior Inspector		1	1	1	1	1	1	1	0	1	0	0
Senior Helpers		3	3	2	2	2	1	5	0	5	4	4
Helpers		0	0	0	0	0	0	0	0	0	0	0
Warehouse/Tool Room Attendant		1	1	1	1	1	1	1	0	1	0	0
		21	21	21	22	21	20	27	0	27	7	7

Hawaii Electric Light Company												
Stores Employee Count												
		Jan	Feb	Mar	Apr	May	Jun					Jun-06
		2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006 TY
Position	RA	Total	Total	Total	Total	Total	Total	Budget	Bud Adj	Test Year	Diff	
Stores -	HDS											
Supervisor, Stores		1	1	1	1	1	1	1	0	1	0	0
Senior Warehouse Attendant		1	1	1	1	1	1	1	0	1	0	0
Warehouse Attendant		2	2	2	2	2	2	2	0	2	0	0
Toolroom Attendant Repairer		0	1	1	1	1	1	1	0	1	0	0
Materials Coordinator		1	1	1	1	1	1	1	0	1	0	0
Helper		0	0	0	0	0	0	0	0	0	0	0
Warehouse Toolroom Attendant Keahole		0	0	0	0	0	0	0	1	1	1	1
Store Keeper		1	1	1	1	1	1	1	0	1	0	0
		6	7	7	7	7	7	7	1	8	1	1

Hawaii Electric Light Company Waimea Employee Count

	Jan	Feb	Mar	Apr	May	Jun	2006 Budget	2006 Bud Adj	2006 Test Year	Jun-06 2006 TY Diff
Position	2006 Total	2006 Budget	2006 Bud Adj	2006 Test Year	2006 TY Diff					
Waimea -										
Assistant Superintendent	1	1	1	1	1	1	1	0	1	0
Working Foreman	2	2	2	2	2	2	2	0	2	0
Lineman	3	3	3	3	3	3	5	0	5	2
Senior Inspector	1	1	1	1	1	1	1	0	1	0
Trouble Inspector	1	1	1	1	1	1	1	0	1	0
Serviceman	1	1	1	1	1	1	1	0	1	0
Apprentice	2	2	3	3	3	3	2	0	2	(1)
Senior Helper	2	2	1	1	1	1	2	0	2	1
Helper	0	0	0	0	0	0	0	0	0	0
Warehouse/Tool Room Attendant	1	1	1	1	1	1	1	0	1	0
	14	14	14	14	14	14	16	0	16	2

CA-IR-97

Ref: T-6, HELCO-611 & HELCO-619 (Distribution Staffing).

HELCO-611 shows that the 2006 test year staffing level (123) will exceed 2005 actual (109) by 14 employees and that 2005 was 15 employees higher than 2004 actual (94). Although page 2 of HELCO-619 does not contain contract services for the 2006 test year forecast, it does indicate that contract services almost tripled (i.e., 2.88 times) between 2004 and 2005. Please provide the following:

- a. Please segregate the contract work in each calendar year between O&M and capital related projects. If the requested information is not available, please explain.
- b. Please explain and reconcile the increase in contract services between 2004 and 2005, specifically identifying any material capital projects.
- c. Was any of the contract services work conducted in 2005 associated with catch-up projects or other work deferred from prior years? If so, please identify such work and the related costs incurred in 2005.
- d. Does HELCO anticipate that the addition of 14 employees in 2005 and 14 more employees in the 2006 forecast will result in a reduced reliance on contract services? Please explain.
- e. If the response to subpart (d) above is no, please provide the specific basis and copies of any documentation supporting said conclusion.

HELCO Response:

- a. The requested information with contract work segregated by indicators NI-non-billable install (capital), NR-non-billable removal (capital), NE-non-billable expense (O&M), BT-billable temporary, NS-non-billable supervisory and NC-non-billable clearing is attached on page 3.
- b. In 2005 the use of contractor services was increased to construct new customer projects in West Hawaii and to construct two transmission line projects in West Hawaii. One of the transmission projects was a 34 kv transmission line to interconnect Hawi Renewable Development in North Kohala. The other transmission project was the Kuakini Highway transmission line relocation project. Contractor services were also used to construct a

distribution conversion project in North Kohala.

- c. Yes, approximately \$166,000 of the 2005 contract services cost was to replace poles and underground cables that were identified for replacement and had design packages prepared in years previous to 2005. A list of these projects is supplied on page 4 of this response.
- d. HELCO does expect the addition of employees to reduce the reliance on contractors, but not in the immediate future. As explained in HELCO T-6, it takes approximately 5 years for an entry level employee to become a fully qualified lineman or electrician. Reduction in productivity occurs due to the newer employee's inexperience and the need for experienced employees to train and monitor the newer employees. Until the newer employees become proficient and/or work requirements are reduced, reliance on contractors will remain high. More details regarding the qualifications of employees in the Technical and C&M divisions are provided in HELCO's response to CA-IR-86.
- e. Not applicable.

Cost	Contractor	parent wo	wo	wo desc	Work Group	Date Work Order Created	Date Work Order Complete	Paid	Indicator
\$ 8,740.00	Telecable	EE00687	EE062760	RPL P-33 TO P-36 MAMANE ST - C	HTWC&M	20041004	20050304	03/05	NE
\$ 2,990.00	Telecable	EE00687	EE062759	RPL P-33 TO P-36 MAMANE ST - R	HTWC&M	20041004	20050304	03/05	NR
\$ 7,218.00	Telecable	EE00687	EE062758	RPL P-33 TO P-36 MAMANE ST - I	HTWC&M	20041004	20050304	03/05	NI
\$ 3,672.43	Mauna Kea	EE00648	EE060734	REM POLELINE LAKELAND-C	HTWC&M	20040811	20050519	08/05	NE
\$ 13,230.91	Mauna Kea	EE00648	EE060733	REM POLELINE LAKELAND-R	HTWC&M	20040811	20050519	07/05	NR
\$ 15,985.99	Mauna Kea	EE00648	EE060732	REM POLELINE LAKELAND-I	HTWC&M	20040811	20050519	07/05	NI
\$ 18,900.15	PAR	EE000479	EE054611	ACC RPL SP-152 MAMALAHOA HWY. -DC	HTWC&M	20040301	20050929	12/05	NI
\$ 1,518.00	Telecable	00006614	EE055400	RPL P-2 HOOKAHUA RD - C	HTWC&M	20040319	20050310	03/05	NR
\$ 8,142.00	Telecable	00006614	EE055398	RPL P-2 HOOKAHUA RD - I	HTWC&M	20040319	20050310	03/05	NI
\$ 3,823.52	PAR	EE000614	EE062579	RPL PRI Melomelo St.-C	HTKC&M	20040928	20051220	03/06	NI
\$ 1,911.76	PAR	EE000614	EE062582	RPL PRI Melomelo St.-C	HTKC&M	20040928	20051220	03/06	NE
\$ 15,684.27	Mauna Kea	EE000693	EE062978	RPL P-67 TO P-69 ALII BLVD.-I	HTKC&M	20041012	20050211	03/05	NI
\$ 8,282.01	Mauna Kea	EE000694	EE062982	RPL P-55 ALII BLVD.-I	HTKC&M	20041012	20051208	01/06	NI
\$ 9,827.00	Telecable	EE000701	EE063344	RPL P-258 HAWAII BELT RD-I	HTKC&M	20041020	20050815	09/05	NI
\$ 45,787.82	Mauna Kea	EE000702	EE063459	RPL KEAUHOU LOOP LINE-I	HTKC&M	20041021	20050802	08/05	NI
\$ 165,713.86	TOTAL								
Indicators:									
NI-non-billable install (capital)									
NR-non-billable removal (capital)									
NE-non-billable O&M expense									

CA-IR-98

Ref: T-7, page 2; Board Approved Operating Budget.

Please provide a complete copy of the referenced "2006 Board approved Operating Budget" along with a complete statement of all assumptions included therein.

HELCO Response:

Refer to HELCO's response to CA-IR-8 and CA-IR-15.

CA-IR-99

Ref: T-7, page 4, lines 14-23; Customer Growth and Volume of Transactions Increases.

Please provide, for each of the years 2002, 2003, 2004 and 2005, the following statistics on a comparable basis:

- a. The number of service orders processed (Starts, changes and terminations);
- b. The number of High Bill Investigations processed;
- c. The number of Customer Inquiries handled; and
- d. The number of Customers being served at year-end.

HELCO Response:

- a. The number of service orders processed are as follows:

2002: 16,753

2003: 15,122

2004: 17,588

The information for 2005 is not readily available.

- b. The number of high bill investigations processed are as follows:

2002: 1,312

2003: 975

2004: 671

The information for 2005 is not readily available.

- c. The number of customer calls received for 2004 was 76,868 and for 2005 was 95,203, which was obtained from HELCO's phone system data files. The breakdown of customer calls between customer inquiries, high bill complaints, requests for start and termination of service and other reasons for customers calling is not tracked and thus not available. The

number of customer calls prior to 2004 is not available from HELCO's phone system.

d. The number of customers being served at year-end are as follows:

2002: 66,411

2003: 69,235

2004: 71,594

2005: 73,835

CA-IR-100

Ref: T-7, page 7; Authorized Positions and Unfilled Vacancies.

Please provide, for each calendar quarter of the years 2002, 2003, 2004 and 2005, the following statistics on a comparable basis:

- a. The number of Customer Service Department authorized positions by RA and job title.
- b. The positions in your response to part (a) of this information request should be within each RA and job title that were unfilled and vacant at quarter-end.
- c. Comparable data regarding test year proposed staffing by RA and job title, as included in the rate filing.

HELCO Response:

- a. The information on the approved number of positions (which is part of the forecast that is presented to HECO officers and HEI executives) by RA and job title for the Customer Services Department is attached on pages 2 - 3 of this response.
- b. See response to item a. above. The information requested is attached – page 4 - 7.
- c. The information requested is attached – page 4 - 7.

Hawaii Electric Light Company Employee Count - Customer Service Department Approved

<u>Position</u>	Note 1				
	<u>RA</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
Administration -	CA				
Manager		0	0	0	0
		<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Revenue Accounting - Hilo (Field Services) -	AR/CR				
Supervisor, Revenue Accounting		1	1	1	1
Senior Customer Service Rep		1	1	1	1
Field Credit Rep		1	1	1	1
Credit/Field Services Rep		1	1	1	1
Field Representative		1	1	1	1
Field Representative		1	1	1	1
Meter Reader		1	1	1	1
Meter Reader		1	1	1	1
Meter Reader		1	1	1	1
Meter Reader		1	1	1	1
Meter Reader		1	1	1	1
Meter Reader		0	0	0	0
		<u>11</u>	<u>11</u>	<u>11</u>	<u>11</u>
Revenue Accounting - Hilo (Cust Services) -	AS/CH				
Senior Customer Service Clerk		1	1	1	1
Customer Accounts Rep		1	1	1	1
Customer Accounts Rep		1	1	1	1
Customer Accounts Rep		1	1	1	1
Customer Accounts Rep		1	1	1	1
Cashier		1	1	1	1
Cashier		1	1	1	1
Mail Clerk		1	1	1	1
		<u>8</u>	<u>8</u>	<u>8</u>	<u>8</u>

Note 1 - Prior to 4/1/05, the Rev Acctg Divisions were part of the Accounting Dept (i.e RA codes were AR, AS, AK and AW). Since 4/1/05, these divisions are part of the Customer Services Dept (i.e. RA codes CR, CH, CK and CW).

Hawaii Electric Light Company Employee Count - Customer Service Department Approved

<u>Position</u>	Note 1				
	<u>RA</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
Revenue Accounting - Kona -	AK/CK				
Supervisor, Revenue Accounting		1	1	1	1
Senior Customer Service Rep		1	1	1	1
Field Credit Representative		1	1	1	1
Field Representative		1	1	1	1
Field Representative		1	1	1	1
Meter Reader		1	1	1	1
Meter Reader		1	1	1	1
Meter Reader		1	1	1	1
District Clerk III		1	1	1	1
District Clerk II		1	1	1	1
District Clerk II		1	1	1	1
District Clerk II		1	1	1	1
District Clerk I		0	0	0	1
		<u>12</u>	<u>12</u>	<u>12</u>	<u>13</u>
Revenue Accounting - Waimea -	AW/CW				
Field Credit Representative		1	1	1	1
Field Representative		1	1	1	1
Meter Reader		1	1	1	1
Meter Reader		1	1	1	1
District Clerk III		1	1	1	1
District Clerk II		1	1	1	1
		<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>
Total Customer Services		<u>37</u>	<u>37</u>	<u>37</u>	<u>38</u>

Note 1 - Prior to 4/1/05, the Rev Acctg Divisions were part of the Accounting Dept (i.e RA codes were AR, AS, AK and AW). Since 4/1/05, these divisions are part of the Customer Services Dept (i.e. RA codes CR, CH, CK and CW).

Hawaii Electric Light Company Employee Count - Customer Service Department

Position	2006												2006 Test					
	RA	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3		Q4	Year			
Administration - CA Manager	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
Revenue Accounting - Hilo (Field Services) - AR/ CR	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
Supervisor, Revenue Accounting	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Senior Customer Service Rep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Field Credit Rep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Credit/Field Services Rep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Field Representative	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Field Representative	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Meter Reader	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Meter Reader	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Meter Reader	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Meter Reader	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Meter Reader	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1
Meter Reader	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0
	10	10	10	11	10	11	11	11	11	11	11	11	10	12	12	11	11	11

Note 1 - Prior to 4/1/05, the Rev Acctg Divisions were part of the Accounting Dept (i.e. RA codes were AR, AS, AK and AW). Since 4/1/05, these divisions are part of the Customer Service Dept (i.e. RA codes are CR, CH, CK and CW).

Hawaii Electric Light Company Employee Count - Customer Service Department

Position	2006												Test	
	RA	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3		Q4
Revenue Accounting - Hilo (Cust Services) -														
Senior Customer Service Clerk	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Customer Accounts Rep	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Customer Accounts Rep	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Customer Accounts Rep	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Customer Accounts Rep	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cashier	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cashier	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mail Clerk	1	1	0	0	0	1	1	1	1	1	1	1	1	1
	8	8	7	7	7	8	8	8	8	8	8	8	8	8

AS/
CH

Note 1 - Prior to 4/1/05, the Rev Acctg Divisions were part of the Accounting Dept (i.e. RA codes were AR, AS, AK and AW). Since 4/1/05, these divisions are part of the Customer Service Dept (i.e. RA codes are CR, CH, CK and CW).

Hawaii Electric Light Company Employee Count - Customer Service Department

Position	2006												Test	
	RA	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3		Q4
Revenue Accounting - Kona - AK/CK	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Supervisor, Revenue Accounting	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Senior Customer Service Rep	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Field Credit Representative	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Field Representative	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Field Representative	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Meter Reader	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Meter Reader	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Meter Reader	0	1	1	1	1	1	1	0	1	1	1	1	1	1
District Clerk III	1	1	1	1	1	1	1	1	1	1	1	1	1	1
District Clerk II	1	1	1	1	1	1	1	1	1	1	1	1	1	1
District Clerk II	1	1	1	1	1	1	1	1	1	1	1	1	1	1
District Clerk II	1	1	1	1	1	1	1	1	1	1	1	1	1	1
District Clerk I	0	0	0	0	0	0	0	1	1	1	1	1	1	0
	11	12	12	12	12	12	11	12	12	13	13	13	13	13

Note 1 - Prior to 4/1/05, the Rev Acctg Divisions were part of the Accounting Dept (i.e. RA codes were AR, AS, AK and AW). Since 4/1/05, these divisions are part of the Customer Service Dept (i.e. RA codes are CR, CH, CK and CW).

CA-IR-101

Ref: T-7, page 21-22, HELCO-924; CIS Project, Stage 1.

Please provide the following information regarding the CIS Project that is the subject of Docket No. 04-0268 (or provide specific reference into document filed in that Docket, as applicable):

- a. Please confirm that other than what was provided in Docket No. 04-0268 (e.g., in response to CA-IR-1, CA-IR-5, CA-IR-7, CA-IR-8, CA-IR-10, etc. as well as in response to CA-SIR-2, CA-SIR-5, CA-SIR-7, CA-SIR-8, etc.) business case, cost/benefit studies and other economic analyses relied upon by the Company to evaluate billing system alternatives and select vendors and technologies for the pending project. If there are any such support not already provided, please provide a complete copy of each item.
- b. Detailed project capital and expense budgets in total and with allocations among the HEI participating companies reflecting the updated information related to costs as disclosed in the May 12, 2006 filing in Docket No. 04-0268, indicating the assumptions and sources of input values used in preparing such estimates.
- c. A detailed statement of actual costs incurred to date, by FERC Account and after distribution among HEI entities.
- d. Discuss any updates, significant changes (e.g., in scope, cost, etc.) or other implementation issues since the May 12, 2006 filing in Docket No. 04-0268.
- e. Please discuss and provide support as to why the Phase I project costs should be included as normalized test year expenses. Please include any analyses, if available, that demonstrate that the expenses specific to this project are not additional to allocated normalized IT expenses.

HELCO Response:

- a. To the extent of HELCO's knowledge, HELCO is not aware of other support material not already provided.
- b. The requested information is included in Attachment 6 of the May 12, 2006 filing in Docket No. 04-0268.
- c. HELCO generally uses NARUC accounts and not FERC accounts. Actual costs to date distributed amount HEI entities by NARUC account is attached hereto as Attachment 1.
- d. The CIS Project is currently in the Analysis Phase (Phase 2) of the project and conducting the gap analysis. As of the date of this response, the CIS Project does not have any updates, significant changes or other implementation issues to report since the May 12, 2006 filing in Docket No. 04-0268.
- e. The Phase I expenses of \$49,800 were actually incurred in 2006, and are included in the test year 2006 expenses in accordance with the PUC's Decision and Order No. 21798, dated May 3, 2005 in Docket No. 04-0268.

ATTACHMENT 1

Company	Project #	NARUC Account	NARUC Account Title	Actual Cost	Billable Cost (In HECO System)
HECO	P0000571	107	Construction in progress	255,661.26	
HECO	P0000571	186	Misc deferred debits	2,543,248.60	
HECO	P0000571	1861	Charges billable to associated companies:		
			HELCO (billable deferred)		563,044.42
			HELCO (billable expense)		254,749.70
			MECO (billable deferred)		488,524.54
			MECO (billable expense)		220,983.94
					1,527,302.60
HECO	P0000571	587	Distribution - Customer installations expense	14,938.59	
HECO	P0000571	901	Customer accounts expense - supervision	1,388.54	
HECO	P0000571	903	Customer records and collection expenses	1,040,883.83	
HECO	P0000571	910	Customer assistance expenses	19.60	
HECO	P0000571	920	Adm and general - salaries expense	68,729.73	
HECO	P0000571	921	Adm and general - Office supplies and expenses	65,317.88	
			HECO Project Cost (as of July 31, 2006)	<u>3,990,188.03</u>	
HELCO	H0000941	107	Construction in progress	47,421.27	
HELCO	H0000941	186	Misc deferred debits	546,648.56	
HELCO	H0000941	901	Customer accounts expense - supervision	761.83	
HELCO	H0000941	903	Customer records and collection expenses	228,668.70	
			HELCO Project Cost (as of July 31, 2006)	<u>823,500.36</u>	
MECO	M0000528	186	Misc deferred debits	524,997.74	
MECO	M0000528	903	Customer records and collection expenses	198,358.78	
			MECO Project Cost (as of July 31, 2006)	<u>723,356.52</u>	
TOTAL PROJECT COST (ALL COMPANIES)				5,537,044.91	

CA-IR-102

Ref: T-7, pages 33-35; Miscellaneous Revenues – Account Nos. 450 and 451.

According to the testimony, no rate changes are proposed for HELCO field collection, late payments, returned checks, service establishment, reconnection, temporary facilities or other charges. Please explain whether any cost of service analyses were performed to determine that existing rate levels are reasonable and provide complete copies of all such studies (if any).

HELCO Response:

No cost of service analyses was performed to determine that the existing rate levels are reasonable. HELCO looked at recorded information and felt that the existing rate levels are reasonable.

CA-IR-103

Ref: T-7, page 29-30, Uncollectibles Mitigation Measures.

- a. For each of the listed measures taken by management to minimize uncollectibles expense, please state the effective date(s) for the described change.
- b. Provide copies of documentation for all changed policies and operating procedures.
- c. Provide a complete copy of the current HELCO procedures manual governing customer application, credit and collection policies.
- d. State whether HELCO commences new service to a customer where a deposit is required, but waits to bill and collect the deposit in arrears, such that no security exists for such new service unless the customer elects to pay the deposit after it is billed.
- e. If your response to part (d) of this information request is affirmative, please explain and provide documentation for any authority relied being relied upon.

HELCO Response:

- a. Except for the letter writing campaign by the Manager, there are no formal effective dates when these measures were implemented. They evolved over the years as an effort to improve daily business practice with customers who are having difficulty paying their electric bills. With regard to the letter writing campaign, the Manager of Customer Services implemented increased communication with commercial customers beginning in the second half of 2004 and continues to date.
- b. See response to (a) above. Emphasizing the mitigation measures to the Customer Services staff is accomplished through on-the-job training, utilization of the procedures manual, periodic meetings and one-on-one communication.
- c. The information was made available in Docket No. 97-0420, CA-IR-7003. There were no changes made since then, however, HELCO procedures will be reviewed after the new CIS is implemented. HELCO is not planning to make any changes to its procedures that would impact the 2006 test year.
- d. Yes.

- e. There is no documentation relied upon that allows HELCO to bill the customer the deposit after new service commences. This practice has been in effect for many years. HELCO has many customers, especially in the Kona and Waimea districts, who call from the mainland to start service. Service may not be available to them when they first arrive from the mainland if a deposit was required to be paid first. Before electric service is started, HELCO does require a payment for a deposit as well as payment of prior unpaid balances in arrears if the customer has a poor credit history or was disconnected for non-payment.

CA-IR-104

Ref: HELCO WP-701, page 3, Account 903 in 2001.

Please explain and provide documentation for all known unusual transactions or other reasons for the large increase in Account 903 charges in 2001, causing the expense in that year to far exceed all other years shown.

HELCO Response:

The increase in expense in Account 903 in 2001 is primarily due to the following:

Higher HECO information service (includes higher development charges of \$51,000)	\$64,000
Higher outside service-temporary hire (off-set by lower labor expense)	\$33,000
Higher outside services (includes collection agency fees of \$75,000 in 2001 vs. \$50,000 in 2000)	\$33,000
Lower labor expense	-\$36,000
Lower HECO intercompany billing	-\$31,000
Higher vehicle charges	\$12,000
Theft of company funds* (charged to Account 903)	\$76,000
Transaction survey (charged to Account 901 in 2000)	\$16,000
Higher non-labor overheads	\$ 7,000

* HELCO had since implemented changes to its internal controls.

CA-IR-105

Ref: T-8, page 6, Intercompany Charges from HECO.

Please provide a detailed breakdown of HECO projected costs by RA, indicating the basis for all amounts estimated to be incurred by HECO and then charged to HELCO for market research, sales and load forecasting, development of a combined heat and power (CHP) program, REEPAH, IRP, DSM and for vehicle materials and outside services to support customer relationship activities.

HELCO Response:

Refer to HELCO's response to CA-IR-2, HELCO T-8, Attachment A, page 1, expense element 550 for basis of intercompany charges from HECO.

CA-IR-106

Ref: T-8, pages 6-9, Renewable Energy and Energy Efficiency Program for Affordable Homes "REEPAH".

Please provide complete copies of all reports, studies, analyses, workpapers, projections and other documents relied upon by HELCO to evaluate the need for and design of the proposed REEPAH program.

HELCO Response:

No reports, studies, analyses, workpapers or projections were specifically prepared for the proposed REEPAH. The purpose of the program is to provide lower income residential customers, which have increased over the past two years, with more "built-in" options to manage their electricity bills. The need for the program emerged after a review of HELCO's current residential rate structure (see HELCO T-19) demonstrated the need for innovative approaches to mitigate the financial impacts of further increases in electricity bills to the residential ratepayers.

At the same time, a key socio-economic issue was emerging in Hawaii County, as documented in economic outlook studies by University of Hawaii Economic Research Organization, UHERO (see HELCO's response to CA-IR-25). This issue was the impact on the economy of Hawaii Island due to the rapidly rising cost of housing. While the run-up in housing values created a windfall for existing homeowners, it increasingly was putting the purchase of housing out of the financial reach of those residents of the island seeking to purchase their first home. It has been pointed out that this segment of the population provides many of the low- to moderate-income labor resources that drive the Big Island economy, including hotel and resort workers and those who are employed with retail stores, restaurants, tour companies, airlines, agriculture, manufacturing, and service industries. The County of Hawaii has made the development of

“affordable housing” a top priority, and has called upon the business community, including HELCO, to participate in developing and implementing solutions to the affordable housing problem (see also HELCO’s response to CA-IR-14).

HELCO has been in discussions with the County of Hawaii for the past year regarding the possibility of forming a partnership to utilize energy efficiency and renewable energy technologies to support affordable housing strategies and goals. On May 5, 2006, a Memorandum of Understanding (MOU) was signed between the parties to collaborate in this way towards the fulfillment of the County’s planned affordable housing project at Waikoloa. The MOU is in Attachment A.

It was intended that in ongoing discussions with the County to implement the MOU, that the County’s designs for the project would be utilized by the two parties to develop specific means of collaboration, and that HELCO could design an appropriate framework for the REEPAH that would provide maximum benefit not only for the County’s project, but for other developers as well. The County has not completed its project design, and we continue to work with them on the project needs and how HELCO can best assist them with the REEPAH. In the meanwhile, HELCO continues work on developing a flexible program framework that will be able to respond to the needs of affordable housing.

Although the County of Hawaii’s project may take a while to mature, we have been in discussions with another developer who is also interested in partnering with HELCO to develop strategies to make affordable homes more energy-efficient, and who currently has affordable

homes under construction in West Hawaii. This developer has indicated that it thinks it may be able to provide a pass-through of the energy efficiency cost from the REEEPAAH benefits that HELCO may provide by increasing homeowners down payment and thus decreasing the remaining mortgage or credit the closing loan costs, thus enhancing their affordability in line with County's goals. HELCO plans to pursue an agreement with this private developer that is similar to the recent MOU with the County of Hawaii, and will be in a position to assist the developer in 2007 if the REEEPAAH program concept is approved by the Commission.

HELCO proposes the annual \$500,000 expenses for REEEPAAH because this amount will allow HELCO to pursue energy efficiency and renewable technologies in a manner that is financially significant for affordable housing projects but at a level that is relatively small from a rate impact perspective. Commission approval of our request for recovery of the costs of the REEEPAAH program will enhance HELCO's ability to align with the County of Hawaii's affordable housing strategies and goals.

MEMORANDUM OF UNDERSTANDING
(County of Hawai'i Waikoloa Employee Housing
Alternative Power Demonstration Project)

THIS MEMORANDUM OF UNDERSTANDING ("Memorandum") is made and entered into as of May 5th, 2006, by and between HAWAI'I ELECTRIC LIGHT COMPANY, INC., a Hawai'i corporation ("HELCO"), and the COUNTY OF HAWAI'I, a municipal corporation organized under the laws of the State of Hawai'i ("County").

RECITALS

A. There is a substantial need to increase the development of affordable housing on the Island of Hawai'i.

B. The County, in addition to private developers, has placed a priority on increasing the inventory of affordable housing for low and moderate income workers located in close proximity to their place of employment.

C. The Island of Hawai'i has an abundance of natural resources such as solar, wind, and hydro resources.

D. The County's Office of Housing and Community Development ("OHCD") is developing an affordable employee housing project at Waikoloa, Hawai'i ("Waikoloa Project").

E. The parties hereto desire to use the Waikoloa Project as a project to showcase the collaboration, development and incorporation of energy efficiency and alternate energy technologies, such as passive and active solar, wind, and distributed and alternative power generation technologies.

F. In the current environment of rising energy prices, and with the goal of increasing sustainable energy sources, the parties desire to yield energy-efficient homes that will substantially reduce power usage, resulting in benefits to the parties hereto, and power consumers and residents of the Island of Hawai'i at large.

G. Efficient energy use, such as compliance with Energy Star requirements, has been recognized by financial institutions, such as Fannie Mae, as a basis for providing favorable financing terms for purchasers of residential

housing, and such efficient energy use would have a direct effect in making units in the Waikoloa Project more affordable to purchasers.

H. The parties desire to memorialize herein their agreement with respect to the development of the Waikoloa Project as an energy efficient and alternative power demonstration project.

AGREEMENT

NOW, THEREFORE, the parties hereto agree as follows:

1. Areas of Collaboration. The parties agree that they shall collaborate in the following areas, as well as such other areas as they may agree upon:

(a) Demand Side Management. To consider including within the Waikoloa Project existing approved and future approved State of Hawai'i Public Utilities Commission ("PUC") demand side management programs on the customer's side of the meter for the purpose of changing the amount and/or timing of energy consumption;

(b) Solar technologies. To include residential efficient solar water heating systems and solar electric systems on non-residential buildings within the Waikoloa Project;

(c) Photovoltaic Technologies. To consider including within the Waikoloa Project technologies that convert light directly into electricity, because such photovoltaic technology (PV) is an appealing alternative to fossil fuel based power generation in that it is a renewable, environmentally benign, and domestically secure energy source, together with net metering, by which an owner receives retail credit for the electricity generated by the owner;

(d) Alternative Power Generation. To consider including within the Waikoloa Project the use of bio-diesel and other non-fossil fuels for power generation;

(e) Wind technologies. To consider including within the Waikoloa Project energy generating systems using wind power;

(f) Distributed Generation. To consider including within the Waikoloa Project on sites leased or conveyed to HELCO by the owners thereof, small, modular electricity generators sited close to the customer load that can enable utilities to defer or eliminate costly investments in transmission and distribution, system upgrades, and provide customers with better quality, more reliable energy supplies and a cleaner environment;

(g) PUC Programs. To develop the PUC-approved affordable housing program to promote the use of energy conservation and renewable energy; and

(h) State and Federal Tax Credits. To fully utilizing existing State of Hawai'i and federal tax credits such as Act 221/215 tax credits.

2. Participation by HELCO. In furtherance of, but without limitation to Section 1 of this Agreement, HELCO agrees to participate in the Waikoloa Project by, inter alia, providing the following services:

(a) Assisting in Energy Star or "Built Green" compliance for residential buildings, and LEED (Leadership in Energy and Environmental Design) certification for commercial buildings in the Waikoloa Project through existing approved and future approved PUC programs;

(b) Reviewing and critiquing energy efficiency components and initiatives of the Waikoloa Project;

(c) Assisting in the integration of solar, photovoltaic, net metering, demand management systems into the Waikoloa Project;

(d) Providing power service for the Waikoloa Project off Paniolo Drive; and

(e) Installing, where possible, distributed and alternative power generation technologies.

3. Participation by County. In furtherance of, but without limitation to Section 1 of this Agreement, the County agrees, subject to applicable provisions of the County of Hawai'i Charter and Hawai'i County Code, to assist in the development of the Waikoloa Project as an

energy efficient and alternative power demonstration project by providing or obtaining the following:

(a) Formally designating the affordable housing Waikoloa Project as an official energy efficient and alternative power demonstration project of the County;

(b) Supporting HELCO's Waikoloa Project-related initiatives before the PUC; and

(c) To the extent consistent with public health, safety and welfare, seeking expedited County permitting review and processing for the Waikoloa Project.

4. Transfer of Waikoloa Project Ownership. HELCO acknowledge that the County may transfer ownership of the Waikoloa Project to a third party, and HELCO agrees that any such transferee shall be a third-party beneficiary of the benefits and services to be provided by HELCO under this Memorandum.

5. Notices. All notices and other communications in connection with this Agreement shall be in writing and shall be deemed to have been received by a party when actually received in the case of hand delivery, facsimile transmission or e-mail to the address, or internationally recognized courier service or three (3) days after being sent by United States mail, as the case may be, of the parties as shown below

To HELCO: Warren H. W. Lee
President
Hawai'i Electric Light Company, Inc.,
Post Office Box 1027
Hilo, Hawai'i 96721-1027
Telephone: 808-969-0124
E-Mail: warren.lee@helcohi.com

To County: County of Hawai'i
Edwin S. Taira
Housing Administrator
Office of Housing and Community
Development
50 Wailuku Drive
Hilo, Hawai'i 96720-2456
Telephone: 808-961-8379
E-Mail: ohcdadmin@co.hawaii.hi.us

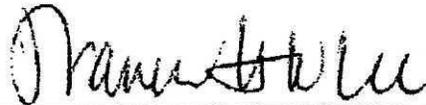
6. Counterparts; Facsimile Execution. The parties hereto agree that this instrument may be executed in counterparts, each of which shall be deemed an original, and said counterparts shall together constitute one and the same agreement, binding upon all of the parties hereto, notwithstanding that all of the parties are not signatory to the original or the same counterparts. For all purposes, including, without limitation, recordation, filing and delivery of this instrument, duplicate unexecuted and unacknowledged pages of the counterparts may be discarded and the remaining pages assembled as one document. An executed counterpart of this instrument transmitted and received by facsimile shall be deemed for all purposes to be an original, executed counterpart hereof.

[SIGNATURES ON FOLLOWING PAGES]

IN WITNESS WHEREOF, the parties hereto have executed
this Memorandum as of the date first above-written.

HELCO:

HAWAI`I ELECTRIC LIGHT COMPANY,
INC.,
a Hawai`i corporation

By 
Warren H. W. Lee
Its President

STATE OF HAWAII)
) SS:
COUNTY OF HAWAII)

On this 16th day May, 2006, before me personally appeared WARREN H.W. LEE, to me personally, who being by me duly sworn, did say that he is the President of The Hawaii Electric Light Company, Inc., a corporation of the State of Hawaii; that the seal affixed to the foregoing instrument is the corporate seal of the corporation; that the foregoing instrument was signed and sealed in behalf of the corporation by its board of directors, and said WARREN H.W. LEE acknowledged said instrument to be the free act and deed of said corporation.

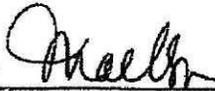


Glenn K. Maeda
Notary Public, State of Hawaii

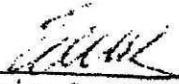
My Commission expires: 8/01/2009

County:

COUNTY OF HAWAII,
a municipal corporation

By 
for Harry Kim
Its Mayor

APPROVAL RECOMMENDED:

By: 
Edwin S. Tairā
Housing Administrator

Dated: May 15, 2006

APPROVED AS TO FORM AND LEGALITY:

By: 
Deputy Corporation Counsel

Dated: May 15, 2006

STATE OF HAWAI`I)
) SS:
COUNTY OF HAWAI`I)

On this _____ day _____, 2006, before me personally appeared Harry Kim, to me personally known, who, being by me duly sworn, did say that he is the Mayor of the COUNTY OF HAWAI`I, a municipal corporation of the State of Hawai`i; that the seal affixed to the foregoing instrument is the corporate seal of said County of Hawai`i; that the foregoing instrument was signed and sealed in behalf of the County of Hawai`i by authority given to said Mayor of the County of Hawai`i by Section 5-1.3(g) of the County Charter, County of Hawai`i (1991), as amended; and said Harry Kim acknowledged said instrument to be the free act and deed of said County of Hawai`i.

Notary Public, State of Hawai`i
My Commission expires: _____

(U)

CA-IR-107

Ref: T-8, pages 16 and 17, Integrated Resource Planning "IRP" expenses and cost recovery.

Please provide the following information regarding HELCO's Integrated Resource Planning expenses:

- a. Actual recorded IRP expenses, by expense element, in each year from 2000 through 2005 and June 30, 2006 YTD.
- b. Calculations supportive of the 2006 test year estimated IRP expenses, by expense element, prior to the adjustment as described at page 16, line 15.
- c. Explain whether/why the Company believes the IRP expense of \$450,000 allowed in the prior rate case is representative of ongoing conditions and should again be allowed by the Commission.
- d. Provide complete copies of all information relied upon in support of your response to part (c) of this information request.
- e. State with specificity the Company's definition and accounting criteria used to isolate IRP costs from other incurred costs.

HELCO Response:

- a. The information requested is attached – page 3.
- b. Refer to page 4 of this response, Activity 711.
- c. Refer to HELCO-WP-801, page 8. HELCO IRP expenses averaged \$491,000 over the last three years and averaged \$335,000 over the last five years. In HELCO's last rate case, Docket No. 97-0207, Decision and order No. 18365, the Consumer Advocate used a three-year average to calculate the \$450,000 amount. Although the current three-year average is higher than the \$450,000 allowed in the prior rate case, HELCO feels the average is higher due to the length of time since the last approved IRP plan. Should the framework of the IRP process be changed, HELCO is open to revising the amount.
- d. See response to (c) above.

- e. See attached, page 3. The attachment is from the ABM dictionary description of “Administer and Implement IRP Programs – Base”, activity 711. All of HELCO’s IRP expenses are charged to activity 711.

Hawaii Electric Light Company, Inc.
IRP Expenses

Account	Activity	Expense Element	Recorded							2006 Operating Budget
			2000	2001	2002	2003	2004	2005	YTD 06/30/06	
909	711	522			102	83	(57)	203	20	
910	711	201	0	45	857	55	1,925	2,152	849	
		205		1,549	3,226	5,643	9,971	5,711	1,899	4,800
		301	34							
		451		362	4,484	3,900	5,757	4,712	2,107	4,344
		501		13	3,699	11,977	496,515	169,351	8,956	91,170
		502		1,289	4,633	2,054	5,900	992		21,000
		503					1,293			
		520		1,057						4,080
		521		95	24	34	1,832	66	1,104	1,500
		522		3,377	3,074	1,358	1,549	446	197	6,120
		900					(33,400)			
			34	7,787	19,997	25,020	491,342	183,431	15,110	133,014
923030	711	550		89,615	82,707	135,206	256,005	381,648	221,575	434,220
Tota IRP Expense			34	97,402	102,806	160,309	747,289	565,282	236,705	567,234
	amortization	900		284,800	1,148,040	(459)				

CODE BLOCK REFERENCE: *ABM Activity Definitions*

Process Group	MANAGE & SUPPORT THE BUSINESS	<small>711 IRP Base</small>
	Major Process Plan & Improve the Business	Index:
	Business Process Forecast & Manage Demand & Energy Needs	Date: 02/26/98

Activity: Administer and Implement IRP Programs - Base	Activity Code: 711
---	---------------------------

<p>Activity Description: This activity includes all tasks associated with the administration and implementation of IRP programs utilizing base resources as defined in the PUC's most recent Decision & Order related to a general rate increase.</p>

<p>Major Work Performed: Develop and administer the IRP plan Assist in the development of Hawaii-specific market and customer data Perform Residential Appliance surveys Develop, implement and evaluate economic models used in utilities, end-use sales and peak forecast for IRP Encourage public participation through educational programs & focus groups Research/develop/enhance/expand IRP advisory group process Prepare IRP annual reports on action plan items Develop, administer & coordinate programs such as on photovoltaic applications & electric vehicles and other renewable energy resources Provides load research (class load study), cost of service and rate design efforts related to IRP for all utilities Plan, develop and implement IRP educational program Customer surveys and related tasks End-use metering of customer equipment Participate in company wide externalities process Coordinate implementation of action plan items with local & Company participants Represent company at UPVG and PV4U meetings Promote the integration of contingency planning with IRP Evaluate new business opportunities with electric vehicles Review and obtain regulatory approvals Ensure compliance with prior regulatory decisions Develop, implement and utilize models for evaluating supply-side & demand-side resources Develop supply-side and demand-side resource characterization for use in developing IRP plans Develop and implement communication plan for IRP</p>
--

<p>See Related Activities:</p>

CA-IR-108

Ref: T-8, pages 18 through 24, Demand Side Management "DSM" Program Expenses and Cost Recovery.

Please provide the following information regarding HELCO Demand Side Management expenses:

- a. Actual recorded DSM expenses, by program and by expense element, in each year from 2000 through 2005 and for June 30 2006 YTD.
- b. Provide a detailed reconciliation of actual DSM surcharge revenues recorded in each year from 2000 through 2005 and June 30, 2006 YTD, relative to the recorded DSM expenses set forth in your response to part (a) of this information request.
- c. Provide a detailed reconciliation of actual DSM base rate revenues recorded in each year from 2000 through 2005 and June 30 2006 YTD, relative to the recorded DSM expenses set forth in your response to part (a) of this information request.
- d. Provide calculations supportive of the 2006 test year estimated DSM expenses, by program and expense element, prior to the adjustment as described at page 18, line 12.
- e. State with specificity the Company's definition and accounting criteria used to isolate DSM Program costs, which are recoverable through the surcharge tariff, from other incurred costs.
- f. State with specificity the Company's definition and accounting criteria used to isolate DSM Program costs, which are recoverable through the base rate tariff allowance, from other incurred costs.
- g. Provide complete copies of all accounting manuals, charts of account, accounting memoranda and other documents prepared for use by Company accounting personnel to isolate and properly account for DSM costs.

HELCO Response:

- a. For a summary of actual DSM expenses, please refer to HELCO's Annual Program Accomplishments and Surcharge Reports for its Commercial and Industrial and Residential DSM programs filed May 31, 2001, March 28, 2002, March 31, 2003, March 31, 2004, May 31, 2005 and March 31, 2006, which are incorporated by reference. June 30, 2006 YTD

expenses are shown on page 3.

- b. For a summary of actual DSM surcharge revenues, please refer to HELCO's Annual Program Accomplishments and Surcharge Reports for its Commercial and Industrial and Residential DSM programs noted in part (a). Actual DSM surcharge revenues collect for program cost recovery, lost margins, interest, shareholder incentives, and revenue taxes, so DSM surcharge revenues normally exceed the DSM expenses described in part (a) of this response. January 2006 to June 2006 surcharge revenues are shown on pages 4 to 9.
- c. There are no base rate revenues collected specifically for DSM costs. The DSM surcharge referenced in part (b) of this response collects for incremental program costs, lost margins, interest, shareholder incentives, and revenue taxes.
- d. See pages 10 to 13.
- e. See page 14. The attachment is from the ABM dictionary description of "Administer and Implement DSM Programs – Incremental", activity 714. All of HELCO's incremental DSM expenses that are recovered through the surcharge are charged to activity 714.
- f. See response to (c) above.
- g. See pages 15 to 40.

Hawaii Electric Light Company, Inc.
DSM Expenses
YTD June 30, 2006

Expense Element	CIEE	CINC	CICR	REWH	Total
201	1,069	397	397	2,783	4,647
205	1,495	538	538	2,341	4,912
451	1,528		0	1,965	3,492
501	17,750	30,775	12,438	270,267	331,230
502	193	193	193	(3,821)	(3,241)
503	25,273	12,636	12,636		50,545
521	77	0	0	108	185
522	310	117	117	478	1,022
550	10,455	451	451	7,826	19,183
900	16,839	12,500	1,321	510	31,170
Total	74,989	57,608	28,091	282,457	443,145

Apr 04 Helco Allocation Percentages
Recorded DSM Surcharge (\$)
January 2006

	<u>Billed</u> <u>Revenue</u>	<u>Previous</u> <u>Unbilled</u> <u>Revenue</u>	<u>Current</u> <u>Unbilled</u> <u>Revenue</u>	<u>Recorded</u> <u>Revenue</u>
R	58,858.70	28,116.37	29,459.37	60,201.70
E	371.47	130.43	140.80	381.84
G	26,886.63	11,139.03	11,211.60	26,959.20
J	88,960.67	35,139.14	33,601.57	87,423.10
U	285.99	228.65	228.22	285.56
H	1,986.49	825.84	803.03	1,963.68
K	2,533.70	759.64	783.46	2,557.52
P	61,177.31	29,826.40	31,147.97	62,498.88
F				0.00
Total	241,060.96	106,165.50	107,376.02	242,271.48

HAWAII ELECTRIC LIGHT COMPANY, INC.
Recorded DSM Surcharge (\$)
February 2006

	<u>Billed</u> <u>Revenue</u>	<u>Previous</u> <u>Unbilled</u> <u>Revenue</u>	<u>Current</u> <u>Unbilled</u> <u>Revenue</u>	<u>Recorded</u> <u>Revenue</u>
R	55,280.71	29,459.37	26,153.47	51,974.81
E	357.86	140.80	115.37	332.43
G	26,181.39	11,211.60	9,851.51	24,821.30
J	84,566.99	33,601.57	26,889.95	77,855.37
U	251.44	228.22	224.50	247.72
H	1,890.13	803.03	637.26	1,724.36
K	2,328.30	783.46	566.28	2,111.12
P	64,138.68	31,147.97	27,174.83	60,165.54
F		0.00		0.00
Total	234,995.50	107,376.02	91,613.17	219,232.65

HAWAII ELECTRIC LIGHT COMPANY, INC.
Recorded DSM Surcharge (\$)
March 2006

	<u>Billed</u> <u>Revenue</u>	<u>Previous</u> <u>Unbilled</u> <u>Revenue</u>	<u>Current</u> <u>Unbilled</u> <u>Revenue</u>	<u>Recorded</u> <u>Revenue</u>
R	57,876.86	26,153.47	27,938.29	59,661.68
E	373.68	115.37	130.33	388.64
G	26,647.13	9,851.51	10,252.87	27,048.49
J	83,902.67	26,889.95	29,646.54	86,659.26
U	294.95	224.50	222.08	292.53
H	1,907.99	637.26	698.90	1,969.63
K	2,226.20	566.28	615.63	2,275.55
P	64,885.63	27,174.83	29,072.75	66,783.55
F		-		-
Total	238,115.11	91,613.17	98,577.39	245,079.33

HAWAII ELECTRIC LIGHT COMPANY, INC.
Recorded DSM Surcharge (\$)
April 2006

	<u>Billed</u> <u>Revenue</u>	<u>Previous</u> <u>Unbilled</u> <u>Revenue</u>	<u>Current</u> <u>Unbilled</u> <u>Revenue</u>	<u>Recorded</u> <u>Revenue</u>
R	77,453.48	27,938.29	47,182.28	96,697.47
E	531.20	130.33	211.49	612.36
G	24,857.19	10,252.87	8,982.47	23,586.79
J	75,860.38	29,646.54	23,579.85	69,793.69
U	236.98	222.08	185.78	200.68
H	1,777.06	698.90	598.72	1,676.88
K	2,118.68	615.63	529.41	2,032.46
P	58,311.59	29,072.75	25,286.69	54,525.53
F		-		-
Total	241,146.56	98,577.39	106,556.69	249,125.86

HAWAII ELECTRIC LIGHT COMPANY, INC.
Recorded DSM Surcharge (\$)
May 2006

	<u>Billed</u> <u>Revenue</u>	<u>Previous</u> <u>Unbilled</u> <u>Revenue</u>	<u>Current</u> <u>Unbilled</u> <u>Revenue</u>	<u>Recorded</u> <u>Revenue</u>
R	94,746.17	47,182.28	48,427.29	95,991.18
E	617.83	211.49	227.74	634.08
G	24,113.39	8,982.47	9,693.60	24,824.52
J	75,129.27	23,579.85	27,132.16	78,681.58
U	246.01	185.78	213.20	273.43
H	1,663.61	598.72	644.79	1,709.68
K	2,000.57	529.41	595.32	2,066.48
P	58,118.25	25,286.69	27,011.83	59,843.39
F		-		-
Total	256,635.10	106,556.69	113,945.93	264,024.34

HAWAII ELECTRIC LIGHT COMPANY, INC.
Recorded DSM Surcharge (\$)
June 2006

	<u>Billed</u> <u>Revenue</u>	<u>Previous</u> <u>Unbilled</u> <u>Revenue</u>	<u>Current</u> <u>Unbilled</u> <u>Revenue</u>	<u>Recorded</u> <u>Revenue</u>
R	96,023.14	48,427.29	47,404.21	95,000.06
E	621.49	227.74	219.55	613.30
G	25,499.64	9,693.60	9,913.10	25,719.14
J	78,391.62	27,132.16	27,700.33	78,959.79
U	405.81	213.20	312.70	505.31
H	1,766.88	644.79	646.97	1,769.06
K	2,103.61	595.32	591.03	2,099.32
P	58,709.98	27,011.83	28,114.13	59,812.28
F		-		-
Total	263,522.17	113,945.93	114,902.02	264,478.26

HAWAII ELECTRIC LIGHT COMPANY
DSM CIEE PROGRAM ESTIMATE

	Expense Element	Units	Rates	2002 \$	2003	2004	2005	2006
1- Incentives:								
TOTAL INCENTIVES	501			80,000	80,000	100,000	100,000	100,000
2- Direct labor - See labor forecast								
3- Outside Services - Implementation								
Allocation:								
CIEE = 50% /CINC = 25%/CICR = 25%								
Contract labor @\$6,400/mo		12	3,200	38,400				
Contract labor @\$6,600/mo		12	3,300	<u>39,600</u>				
Total Contract Labor (increase 3% per year)	503			78,000	80,340	82,750	85,233	87,790
HECO-Energy Services Customer Efficiency Pgms Div								
HECO-Energy Services Pricing Division								
HECO-Regulatory Affairs								
HECO charges - per ICB	550							30,264
Printed Materials (Increase 3% per year)	205	12	500	6,000	6,180	6,365	6,556	6,753
TOTAL OUTSIDE SERVICES - IMPLEMENTATION				84,000	86,520	89,116	91,789	124,807
4- Outside Services - Tracking per ICB								168
5- Outside Services - Evaluation								
Xenergy:								
Budgeted (per Xenergy) last estimate								
HECO Energy Services - per ICB								73,728
TOTAL EVALUATION	550			0	0	0	0	73,728
6- Outside Services - Design Assistance								
TOTAL OUTSIDE SERVICES				84,000	86,520	89,116	91,789	198,703
7- Advertising & Marketing (increase 3% per year)								
Weekly/monthly ads (Hi Trib/Big Island Business, etc.)		6	2,320					
Quarterly ads (Building Industry/Hawaii Business, etc.)		6	1,910					
Ad services		6	200					
TOTAL ADVERTISING	501			30,000	30,900	31,827	32,782	33,765
8- Materials, Travel & Misc.								
\$800/mo - including:	205/501	12	800	9,600	9,888	10,185	10,490	10,805
copy machine lease @\$70/mo (increase 3% per year)								
Vehicle - see vehicle forecast	301							
ISD- per HECO	451							4,299
TOTAL MATERIALS, TRAVEL, MISC				9,600	9,888	10,185	10,490	10,805

HAWAII ELECTRIC LIGHT COMPANY
DSM CINC PROGRAM ESTIMATE

	Expense Element	Units	Rates	2002 \$	2003	2004	2005	2006
1 - Incentives:								
TOTAL INCENTIVES	501			105,000	105,000	100,000	100,000	100,000
2 - Direct labor - See labor forecast								
3 - Outside Services - Implementation (increase 3% per year)								
Allocation:								
CIEE = 50% /CINC = 25%/CICR = 25%								
Contract labor @\$6,400/mo		12	1,600	19,200				
Contract labor @\$6,600/mo		12	1,650	19,800				
Total Contract Labor (increase 3% per year)	503			39,000	40,170	41,380	42,620	43,900
HECO charges - per ICB								2,688
TOTAL OUTSIDE SERVICES - IMPLEMENTATION				39,000	40,170	41,380	42,620	43,900
4 - Outside Services - Tracking								
5 - Outside Services - Evaluation								
Xenergy:								
Budgeted (per Xenergy) last estimate	501							24,630
HECO Energy Services - Other				0				
TOTAL EVALUATION				0	0	0	0	0
6 - Outside Services - Design Assistance (increase 3% year)	501			12,000	12,360	12,730	13,110	13,500
TOTAL OUTSIDE SERVICES				51,000	52,530	54,110	55,730	57,400
7 - Advertising & Marketing								
Special ads - trade publications				15,000				
TOTAL ADVERTISING (increase 3% per year)	501			15,000	15,450	15,910	16,390	16,880
8 - Materials, Travel & Misc.								
\$150/mo (increase 3% per year)	205/501	12	150	1,800	1,850	1,910	1,970	2,030
TOTAL MATERIALS				1,800	1,850	1,910	1,970	2,030

HAWAII ELECTRIC LIGHT COMPANY
DSM CICR PROGRAM ESTIMATE

	Expense Element	Units	Rates	2002 \$	2003	2004	2005	2006
1 - Incentives:								
TOTAL INCENTIVES	501			105,000	110,000	100,000	100,000	105,000
2 - Direct labor - See labor forecast								
3 - Outside Services - Implementation								
Allocation:								
CIEE = 50% /CINC = 25%/CICR = 25%								
Contract labor @\$6,400/mo		12	1,600	19,200				
Contract labor @\$6,600/mo		12	1,650	<u>19,800</u>				
Total Contract Labor (increase 3% per year)	503			39,000	40,170	41,380	42,620	43,900
HECO charges - per ICB	550							2,700
TOTAL OUTSIDE SERVICES - IMPLEMENTATION				39,000	40,170	41,380	42,620	43,900
4 - Outside Services - Tracking								
5 - Outside Services - Evaluation								
Xenergy:								
Budgeted (per Xenergy) last estimate		year 3 only	550	24,630				24,630
HECO Energy Services - Other				0				
TOTAL EVALUATION				0	0	0	0	24,630
6 - Outside Services - Design Assistance	501			12,000	12,360	12,730	13,110	13,500
TOTAL OUTSIDE SERVICES				51,000	52,530	54,110	55,730	82,030
7 - Advertising & Marketing								
Special ads - trade publications	501			15,000	15,450	15,910	16,390	16,880
TOTAL ADVERTISING				15,000	15,450	15,910	16,390	16,880
8 - Materials, Travel & Misc.								
\$50/mo	205/501	12	50	600	620	640	660	680
TOTAL MATERIALS				600	620	640	660	680

CODE BLOCK REFERENCE: *ABM Activity Definitions*

714 DSM Incr

Process Group	MANAGE & SUPPORT THE BUSINESS	Index:
Major Process	Plan & Improve the Business	
Business Process	Forecast & Manage Demand & Energy Needs	Date: 02/26/98

Activity: Administer & Implement DSM Programs - Incremental	Activity Code: 714
--	---------------------------

Activity Description:
This activity includes all of the tasks associated with the administration and implementation of DSM programs utilizing incremental resources as defined in the PUC's most recent Decision & Order related to a general rate increase.

Major Work Performed:

- Perform program administration
- Determine target markets
- Run cost-effectiveness tests
- Prepare forecasts for DSM purposes: budget, energy savings and demand savings
- Calculate customers' energy and demand savings
- Pay incentives to customers and vendors
- Establish pricing strategy
- Track program installations and energy savings
- Track capital equipment paid for by the programs
- Inspect energy efficient equipment installed
- Develop promotional strategy
- Formulate marketing and advertising plans
- Evaluate competitive strategies & potential response
- Gather, organize, store and Analyze data & develop reports related to monitoring, tracking & evaluation of DSM programs & customer needs assessments
- Compute DSM recovery surcharge
- Compute lost margins and shareholders incentives
- Prepare, review and meet regulatory requirements
- Monitor revenues from actual costs and provide financial reports to Program Managers by programs at HECO, HELCO and MECO
- Plan, develop & implement DSM educational programs

See Related Activities:

SD

INTEROFFICE CORRESPONDENCE



Hawaiian Electric Co., Inc.

October 23, 1995

To: Sharon Hagihara Estrella Seese
Joe Hayes Ernest Shiraki
Alan Hee Nelson Watanabe
Lorie Nagata ✓ Tom Goya-HELCO
Steve Kealoha-MECO Hugues Ogier-MECO

From: Sharon Suzuki *Sharon*

Subject: *Final* Financial Reporting & Cost Recovery Procedures for DSM Programs

Enclosed are *final* copies of the Financial Reporting and Cost Recovery procedures for the proposed DSM programs.

Thank you very much for the time you put into helping us plan our DSM programs. We appreciate your input and comments.

Enclosure

cc: Norris Creveston
Keith Block
Stanley Shimoda
Ruby Shimabukuro
Elaine Wong
DSM File

**FINANCIAL REPORTING AND CONTROLS
FOR DSM PROGRAMS**

Financial reports have been developed by Management Accounting in conjunction with the DSM division for HECO, HELCO and MECO. The purpose of these "ad hoc" reports are:

- To establish a financial reporting system, which ties to the companies' Financial Information System ("FIS"), to track DSM program costs.
- To facilitate the DSM program cost recovery and program evaluation processes.
- To manage, monitor and report the program's recorded expenses against amounts authorized by the Public Utilities Commission ("PUC") in its final Decision and Order ("D&O").

The ad hoc reports will present recorded costs by FIS cost type on a monthly and year-to-date basis by DSM program. They will also report variances between: total recorded program costs and total program budgets (as authorized by the PUC), and total recorded program costs and forecast amounts used to determine the initial cost recovery rates. Summary reports have also been designed to compare monthly and year-to-date costs for all DSM programs. These reports will facilitate preparation of the year-end program cost reconciliations. (See Attachment A for sample reports.)

Although reporting to the PUC is expected to be filed on an annual basis, it will be necessary to prepare monthly DSM program variance analyses for control purposes. Preparation of these variance reports will help program managers to identify any problems on their projects, and will tie in to the internal financial reporting and controls currently done by each department (Energy Services for HECO and Customer Service for HELCO and MECO). The internal variance analyses and revised forecasts that are currently prepared tie in to each company's financial reporting and cash flow projections completed on a regular basis by their Management Accounting departments.

Please note that the main purpose of these ad hoc reports is for external reporting to the PUC. These external reports are expected to be different from the internal reports prepared by each department's budget coordinator in that the variances are computed against the PUC-authorized budget and cost recovery forecasts instead of the operating forecast.

In order for these reports to be effective financial management tools, the following procedures must be followed:

PRE-IMPLEMENTATION REQUIREMENTS

1. The DSM Division will work with General Accounting (Ernie Shiraki and Nelson Watanabe) to ensure that DSM Accounting Guidelines are established. (See Attachment B.) A copy of these Guidelines will be provided to the Customer Service departments at HELCO and MECO for review with their respective Accounting departments for applicability to their DSM programs.

2. Establish activity, sub-activity and work order numbers for the DSM programs.
 - The DSM Division will work with Management Accounting to establish activity and sub-activity numbers for each DSM program for HECO. The activity/sub-activity structure will be communicated by the DSM Division to the Customer Service departments at HELCO and MECO for their implementation.
 - Each company will ensure that the appropriate sub-activities are created for base (O&M, functional accounts), incremental and rebate charges; and that they reference the appropriate deferred charge or expense accounts. (See the DSM Accounting Guidelines, Attachment B.) Base charges are those costs that are included in each company's most recent rate case or base rates. Incremental charges are those costs over and above each company's base rates. Usually the split between base and incremental charges is associated with labor.
 - Each company will open work orders, as required, through their Division/Department clerk/secretary. Work orders will be needed to track rebates by technologies, capital items, and other functions that may require cost breakdowns where the activity, sub-activity and cost type do not provide for the breakdown. For example, marketing expenses may need to be separated into promotional costs vs. advertising costs.
3. Program Managers will itemize program budgets into FIS cost types. DSM Director/Customer Service Manager will review program budgets.
4. Program Managers will work with Division/Department Clerk/Secretary to manage work order numbers to be used to record expenses and to establish a procedure to ensure accurate recording of expenses. The Program Manager will be responsible for coding all invoices for the program and distributing work order numbers to other departments, as required.

PROGRAM IMPLEMENTATION

Upon Receipt of PUC's D&O

1. The DSM Division will review the DSM Accounting Guidelines and work with General Accounting to revise, if necessary, per the PUC's D&O. Any changes will be communicated by the DSM Division to the Customer Service departments at HELCO and MECO to review with their respective Accounting departments for applicability to their DSM programs.
2. Each company will review their activity and sub-activity codes to ensure that the structure will meet the reporting requirements, and revise as necessary.
3. Each company will review the ad hoc reports from the Management Accounting department to be sure that the reports will meet the necessary regulatory reporting requirements.
4. The DSM Division will work with Management Accounting to design and/or modify the financial reports for all companies.
5. Program Managers will calculate any budget revisions for each DSM program by activity/sub-activity and cost types. Each company will provide their revised budgets to the DSM Division (Elaine Wong), who will review all companies' estimates and provide them to Management Accounting so that the revised budgets can be included in the financial reports.
6. Program Managers will also estimate program costs to be recovered through the IRP Surcharge. Each company will provide their cost recovery estimates to the DSM Division

(Elaine Wong), who will review all companies' estimates for consistency. She will then work with the Pricing division (Estrella Seese) to provide them the estimated program costs to be recovered through the IRP surcharge. These amounts will be reported on Attachment A in the column labeled "Forecast".

7. Program Managers will coordinate opening all necessary work orders through the Division/Department Clerk/Secretary and establish a list of all work orders for each program.

Monthly

1. Process all invoices through the Division/Department Clerk/Secretary.
 - Review invoice to ensure that supporting documentation (e.g., timesheets, expense reports, progress reports) is provided.
 - Ensure that expense coding is consistent with the DSM Accounting Guidelines.
 - Document the allocation methodology for any expenses that are to be allocated to different programs, companies, etc. BEFORE invoices are processed. If the allocation is between companies, ensure that intercompany billing work orders and subsidiary purchase orders are established
 - Audit invoice. Make sure that supporting documentation ties to amounts being billed. Make sure that expenses being billed are reasonable and consistent with any contracts/agreements. If expenses are tied to a purchase order, make sure that the purchase order number is on the invoice.
 - Obtain approvals. Program Manager and DSM Director should initial invoice. The Energy Services/Customer Service Department Manager must sign. When all signatures are received, Division/Department clerk/secretary will generate file copies and forward the original copies to Accounts Payable for payment. Accounts Payable will send the check directly to the vendor, unless given special instructions.
 - At the end of each month, the Division/Department clerk/secretary is to check that invoices are properly paid per the Monthly Accounts Payable Charges By Responsibility Area report (FSA/071R). Any mischarges should be communicated to the Program Managers and corrected in the following month through the department's budget coordinator.
 - Division/Department Clerk/Secretary will file copies of invoices.
2. The DSM Division/Customer Service Department will identify significant variances between amounts recognized as expense versus revenues for each program, and report these to their respective Accounting Departments (General Accounting and Management Accounting for HECO).

Please note that this task will be completed after month-end closing because revenue information is not available until the 4th working day after each month. Therefore, any journal entries that may be necessary to match revenues and expenses for financial reporting purposes will be completed by General Accounting with a one month lag.

Although the recording of any significant variances will be lagged by a month, General Accounting will need to be advised if the current month's program costs exceed the average

monthly forecast of program costs by \$200,000 or more, if possible. Since most significant spending variances are expected to be related to rebate payments, using the Job Cost Detail reports will be useful for this task.

3. Reports for all companies will be sent to the DSM Division (Elaine Wong) for distribution to each company. Program Managers will review ad hoc reports received from Management Accounting.
4. Each company will identify any mischarges, and work with the department's budget coordinator to process any journal entries/corrections to mischarges. (Journal entries should be sent to Job Accounting for processing.)
5. Program Managers will work with the department's DSM Analyst to explain significant variances, and reconcile explanations to operations/goals/impacts of the programs. The DSM Analyst will prepare variance reports: detailed reports for Program Managers and DSM Director; summary reports for senior management. HELCO and MECO will provide the DSM Division (Elaine Wong) with copies of their variance reports for distribution and reporting to the IRP Task Force and IRP Steering Committee, as required.
6. The DSM Analyst will work with the Program Managers to reconcile customer incentives paid per the general ledger (work orders) against customer incentives paid per the Demand-Side Management Information System ("DSMIS") rebate reports.
7. The DSM Analyst will work with the Program Managers and the Division/Department Clerk/Secretary to track any capital purchases separately for tax reporting purposes. Work orders will be used to track these costs. Prepare a hard copy file to include: each month's Job Cost Detail Report for capital purchases, and copies of the corresponding invoices. This file will be provided to the Taxes and Depreciation division of General Accounting (Joe Hayes) at year-end.

Annually

1. Program Managers will prepare two-year *Operating Forecast* for their programs by activity/sub-activity and cost type. Use DSM program budgets itemized by cost types to complete this task. Provide Forecast to the Division/Department Clerk/Secretary for input to FIS. The department's budget coordinator will consolidate all DSM program expenses and report the amounts to Management Accounting for revenue forecasting purposes. Additionally, the DSM division/Customer Service departments will provide lost margin and shareholder incentive estimates to Management Accounting. This Forecast process is usually due in the summer and is completed separately by each company.
2. In May, September, November, and/or as required by Management Accounting, the DSM Analyst will work with the Program Managers to prepare revised forecasts ("*Forecast Updates*") of the current year's operating forecast with the department's budget coordinator.
3. The DSM Analyst will provide support to Program Managers in preparation of the Annual Program Modification and Evaluation Report, which is due November 1.
 - Prepare a revised forecast of program expenses for the following year based on any modifications to the DSM programs.
 - Work with Pricing division (Estrella Seese) to compute revised IRP surcharge.

DRAFT

HECO
 Summary of DSM Programs
 Incremental Costs
 Month & Year-To-Date Variances
 As of May 1995

Program	Activity	Month		Year-To-Date		Full-Year Forecast (1)	Full-Year Budget (2)
		Actual Forecast (1)	Budget (2)	Actual Forecast (1)	Budget (2)		
C & I Energy Efficiency		0	0	0	0	0	0
C & I New Construction		0	0	0	0	0	0
C & I Customized Rebate		0	0	0	0	0	0
Res Efficient Water Heating		0	0	0	0	0	0
Res New Construction		0	0	0	0	0	0
TOTAL		0	0	0	0	0	0

Notes

- Forecast is estimate used to compute IRP Surcharge.
- Budget is annual amount authorized by the PUC. D&O; may include budget carryforward amounts.

8/2/95

HECO
Summary of DSM Programs
Incremental & Base Costs
Month & Year-To-Date Variances
As of May 1995

Program	Activity	Month			Year-To-Date			Full-Year Forecast (1)	Full-Year Budget (2)
		Actual Forecast (1)	Budget (2)	Variance vs. Budget	Actual Forecast (1)	Budget (2)	Variance vs. Budget		
C. A. I Energy Efficiency		0	0	0	0	0	0	0	
C. A. I New Construction		0	0	0	0	0	0	0	
C. A. I Customized Rebate		0	0	0	0	0	0	0	
Res Efficient Water Heating		0	0	0	0	0	0	0	
Res New Construction		0	0	0	0	0	0	0	
TOTAL		0	0	0	0	0	0	0	

Notes

- 1 Forecast is estimate used to compute IRP Surcharge.
- 2 Budget is annual amount authorized by the PUC D&O; may include budget carryforward amounts.

INTEROFFICE CORRESPONDENCE



Hawaiian Electric Company

Date: September 28, 1995

To: Sharon Suzuki

From: Ernest Shiraki

Subject: DSM Accounting Guidelines

Prospective recovery of DSM program costs and lost margin

We understand that HECO will recover DSM program costs and lost margin on a prospective (forecast) basis through a monthly surcharge adjusting base rates. The cost recovery will be "trueed-up" as follows: on an annual basis (after each December 31) the recorded costs for each DSM program will be compared to the revenues collected under that particular program, and any difference (after adjusting for revenue taxes included in the revenue collected total) will be added to or subtracted from the subsequent year's surcharge. Similarly, amounts collected for lost margin will be compared with what should have been collected, and the following year's surcharge will be adjusted accordingly.

How should the costs and revenues of the DSM programs be recorded on our books?

We understand that revenues for the DSM programs will be collected from customers throughout the life of the program, and will be recorded based on a rate per KWH sold. Related costs for the DSM program, however, will fluctuate from month to month, and will likely be relatively low in the early months of the program, and escalate significantly in the months when rebates are paid. With this in mind, how do we match the program costs with the related revenues to avoid having mismatches between monthly revenues and expenses, and the resulting unrealistic swings in monthly net income?

A relatively simple method to handle the potential mismatches in DSM program costs and revenues would be to generally record costs and revenues as incurred, but defer the recognition of revenues or expenses should the mismatches become significant. Under this approach, which we are recommending, we would record all amounts received through the surcharge as revenue when billed, and record all costs as expenses when incurred. The Energy Services Department would be responsible for completing a monthly report comparing each program's cumulative recorded expenses and revenues at each month-end, and would closely monitor any differences. A copy of that monthly comparative report would be sent to Nelson Watanabe in the General Accounting Department. On a monthly basis, if the comparative report shows that accumulated expenses for the programs significantly exceed the accumulated recorded revenues (adjusted for revenue taxes), General Accounting will reclassify the portion of expenses which exceed the revenues from expense to a regulatory asset at month end. Conversely, if revenues significantly exceed expenses, General Accounting will reclassify the portion of revenues which exceed expenses from revenues to a regulatory liability at month end. The monthly comparison by the Energy Services Department of program expenses with revenues should be completed and furnished to the General Accounting Department on a timely basis (generally by the 4th working day after each month), so that any necessary adjustment can be recorded for the same month through which the related accumulated revenues and expenses are compared. If this deadline cannot be adequately met, the

comparison and any related adjustment can be lagged by one month, i.e. we would make an adjustment in the current month based on a comparison of accumulated revenues and expenses through the end of the previous month.

How should we account for prospective recovery of lost margin?

We understand that, with respect to lost margins, it is appropriate to assume that the timing of the lost margin will approximate the timing of the revenues recorded to reflect recovery of the lost margin. In other words, the assumption is that there should not be a significant "mismatch" in the recording of the lost margin and related revenues. As such, amounts collected for lost margin would be recognized as revenues when billed to customers through the surcharge. On a quarterly basis (March 31, June 30, September 30, and December 31), the Energy Services Department would compare the accumulated lost margin actually recovered versus the lost margin that should have been recovered. A copy of that quarterly comparative report should be sent to Nelson Watanabe. If a significant difference exists, the General Accounting Department may decide to adjust revenues to reflect the proper amount of accumulated lost margin. The Energy Services Department's comparison for lost margin must be completed and furnished to the General Accounting Department on a timely basis (generally by the 4th working day after each quarter end), so that any necessary adjustment can be recorded in the same quarter through which the related lost margin comparison was made.

How should we account for retrospective recovery of shareholder incentives?

We understand that shareholder incentives will be recovered retrospectively through the surcharge, i.e. the incentive earned in the current year will be collected from customers in the subsequent year based on a rate per kWh sold. A true-up will be required for any difference between forecast and actual shareholder incentives collected. The Energy Services Department would be responsible for estimating the cumulative amount of incentives earned during the current year on a quarterly basis, and providing

that estimate to Nelson Watanabe. If significant, the estimated cumulative amount of incentives earned in the current year may be recorded as revenues in the quarter it is earned, even though those amounts won't be collected from customers until the subsequent year (provided we have PUC approval to collect those incentives).

How do we need to track DSM capital expenditures?

We understand that the Commission has allowed all DSM expenditures that are of a capital nature to be expensed and recovered through the IRP clause (as HECO has proposed), rather than be capitalized and recovered through depreciation expense. However, for income tax reporting purposes, these capital type expenditures must be capitalized and depreciated. We thus need to track these costs to ensure that we account for them properly for income tax purposes. Separate workorders need to be issued specifically for DSM capital type costs that have been expensed. A separate workorder should be issued for each "class" of capital expenditure. Presently, it appears that at least 3 separate workorders will be needed: (1) for office furniture and equipment, (2) for transmission and distribution capital expenditures and (3) for experimental type of expenditures such as for wind energy and ice cold storage.

Besides issuing specific workorders, we need to physically track any DSM related capital type items that eventually have some other non-DSM use. For example, meters may be purchased and be initially used specifically for a DSM program, but be subsequently used for other utility purposes once the DSM program ends. Properly accounting for such a situation can be a challenge. We suggest avoiding the situation by simply selling the capital type items upon conclusion of the DSM program, and crediting the sales proceeds back to the program expenses. If, however, HECO use of the capital type items is necessary, the items need to be tagged to identify them as former DSM program capital assets. Such assets should be the exception, and we suggest that the Energy Services Department contact the General Accounting Department when such assets are identified, to determine the specific accounting and tracking requirements for these assets.

If you have any questions on the recommendations contained herein, please feel free to call Nelson
Watanabe or myself.

cc: Joe Hayes
Lorie Nagata
Jan Oshire

Loretta Shimizu

DSM PROGRAM COST RECOVERY PROCEDURE

Prior to Receipt of PUC Approval

1. The DSM Division will meet with General Accounting, Management Accounting, Pricing division and Forecasts division personnel to discuss the procedures/coordination of information for DSM program cost recovery.
2. The DSM Division will identify information needed to prepare cost recovery filings for DSM program costs, lost margin and shareholder incentives, and meet with providers/receivers of information to agree on the areas of responsibility. (See Attachment A.)
3. The DSM Division will finalize the Cost Recovery Procedure after review by General Accounting, Management Accounting, Pricing division, Forecasts division, and HELCO and MECO Customer Service Departments.
4. The DSM Division will meet with HELCO's Customer Service Department (Dave Woll) to ensure that the DSM surcharge does not appear on the customer's bill as a separate line item.

Initial Cost Recovery

1. The DSM Division/Customer Service Departments at HELCO and MECO will ensure that the cost recovery filing is prepared in accordance with the PUC's Decision and Order ("D&O").
2. The initial cost recovery filing is due to the PUC 30 days from receipt of the D&O.
3. The DSM Division will estimate the amount of program costs and lost margin to be recovered for each DSM program. The DSM groups in the Customer Service Departments at HELCO and MECO will complete this task for their companies' programs. Cost recovery is expected to be as follows: commercial program costs from commercial rate schedules and residential program costs from residential customers. DSM Program Managers will prepare the cost estimates, and the DSM Director and Energy Services Department Manager/Customer Service Department Manager will review the estimates.
 - These estimates should cover the period beginning with the approval date per the PUC's D&O through the end of the calendar year.
 - To calculate the program cost estimate, review the approved program budget and operating forecasts. Use the spreadsheets developed by Keith Block for each DSM program to compute these estimates by FIS cost type. (See Attachment B.)
 - To calculate the lost margin estimate, obtain the latest sales forecast by rate schedule from the Forecasts Division (SF) and the Company's latest rate case work papers from the Pricing Division (SP). Use the spreadsheets developed by Synergic Resources Corporation ("SRC") for each DSM program to compute these estimates. (See Attachment C.)
4. These program cost and lost margin estimates are to be summarized and provided to Elaine Wong of the DSM Division, for initial review across companies, then to Estrella Seese of the Energy Services Department Pricing Division, with supporting workpapers. (See Attachment D.)

5. The Pricing Division will compute the amount of the IRP surcharge and provide it to the Regulatory Affairs Department for filing with the PUC. Copies will also be provided to General Accounting, Management Accounting and the DSM division.
6. The cost recovery will be effective 60 days from the D&O through the end of the calendar year.

November 1

1. The DSM Division/Customer Service Departments at HELCO and MECO will review and evaluate the DSM programs and make any revisions to the programs. For example, changes in delivery mechanisms and rebate levels.
2. The DSM Division/Customer Service Departments at HELCO and MECO will revise next year's program budget (January - December) in accordance with any program revisions, and will provide Elaine Wong of the DSM Division and the Pricing Division with the program cost estimates for the next calendar year (January - December).
3. The DSM Division/Customer Service Departments at HELCO and MECO will also provide the Pricing Division with the lost margin estimate to be recovered over the next calendar year (January - December).

March 31

1. After General Accounting completes its year-end close, the DSM Division/Customer Service Departments at HELCO and MECO will review all recorded costs and year-end reports for any major discrepancies/mischarges. They will make a list of these discrepancies and review them with their Director/Manager and department budget coordinator before making any adjustments to the recovery amounts or to the FIS system. A copy will be provided to Elaine Wong of the DSM Division.
2. The DSM Division/Customer Service Departments at HELCO and MECO will calculate the amount of shareholder incentives earned during the past calendar year. (Use the spreadsheets developed by Synergic Resources Corporation for each DSM program to compute these amounts by updating the prior year program costs and impacts.)
3. The DSM Division/Customer Service Departments at HELCO and MECO will reconcile actual lost margin to the estimated lost margin used in the IRP Surcharge.
4. The DSM Division/Customer Service Departments at HELCO and MECO will reconcile actual program costs to the estimated program costs used in the IRP Surcharge.
5. The DSM Division/Customer Service Departments at HELCO and MECO will work with the Forecasts division to compute actual revenue collected vs. estimated revenue.
6. All companies will provide Elaine Wong of the DSM Division, and the Pricing division with the reconciled program costs and lost margin. Add shareholder incentives earned in the prior year. The sum of these amounts will be part of the IRP Surcharge adjustment effective 30 days from the filing date. To be consistent with the firm capacity surcharge effective April 1, the Annual Program Accomplishments and Surcharge Report would need to be filed by March 1.

7. The DSM Division/Customer Service Departments at HELCO and MECO will prepare a report explaining variances between forecast and actual program costs and lost margin, and provide a copy to Elaine Wong of the DSM Division.
8. The DSM Division/Customer Service Departments at HELCO and MECO will prepare a report explaining variances between forecast and actual program impacts, and provide a copy to Elaine Wong of the DSM Division.
9. The above explanations will be included in the Annual Program Accomplishments and Surcharge Report.

Attachment A
Page 1 of 2

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DSM PROGRAM COST RECOVERY					
REQUIRED INFORMATION					
				Originating	Receiving
Reporting Period	Cost Description	Input Variables	RA	RA	
1	<i>Initial Cost Recovery</i>	<i>Program Costs</i>	Forecast Program Costs (\$)	SD	SP
2					
3		<i>Lost Margin</i>	Base Energy Charge (cent/kWh)	SP	SD
4			Base Demand Charge (\$/kW)	SP	SD
5			Fuel in Base Energy Rate (cent/kWh)	SP	SD
6			kWh/kW Block Information	SP	SD
7			Variable O&M (cent/kWh)	SF	SD
8			Forecast Sales (kWh) by Rate Schedule	SF	SD
9			Coincidence Factor (%) by Rate Schedule	SP	SD
10			Forecast kWh and kW Impacts by DSM Program	SD	
11			Lost Margin (\$) to be Recovered	SD	SP
12		<i>Overall</i>	Forecast Sales (kWh) by Rate Schedule	SF	SP
13	<i>Monthly</i>	<i>Program Costs</i>	Actual Program Costs (\$)	SD	
14		<i>Lost Margin</i>	Recorded kWh/kW Savings	SD	
15			Lost Margin (\$) Earned	SD	
16		<i>Overall</i>	Actual \$ Collected by Rate Schedule	SF	SP
17			Variance	SF	AC
18	<i>November 1</i>	<i>Program Costs</i>	Forecast Program Costs (\$) for next year	SD	SP
19			Forecast Sales (kWh) by Rate Schedule for next year	SF	SP
20		<i>Lost Margin</i>	Base Energy Charge (cent/kWh)	SP	SD
21			Base Demand Charge (\$/kW)	SP	SD
22			Fuel in Base Energy Rate (cent/kWh)	SP	SD
23			kWh/kW Block Information	SP	SD
24			Variable O&M (cent/kWh)	SF	SD
25			Forecast Sales (kWh) by Rate Schedule for next year	SF	SD
26			Coincidence Factor (%) by Rate Schedule	SF	SD
27			Lost Margin (\$) to be Recovered next year	SD	SP
28	<i>March 31</i>	<i>Program Costs</i>	Recorded Program Costs (\$) for prior year	SD	SP
29		<i>Lost Margin</i>	Base Energy Charge (cent/kWh)	SF	SD
30			Base Demand Charge (\$/kW)	SF	SD
31			Fuel in Base Energy Rate (cent/kWh)	SF	SD
32			kWh/kW Block Information	SP	SD
33			Variable O&M (cent/kWh)	SF	SD
34			Recorded Sales (kWh) by Rate Schedule	SF	SD
35			Coincidence Factor (%) by Rate Schedule	SF	SD
36			Recorded kWh/kW Savings	SD	SF
37			Net Lost Margin (\$) to have been Recovered (actual)	SD	SF

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38		Overall	Actual \$ Collected by Rate Schedule	SF	SP
39		Shareholder Incentives	Recorded Program Costs (\$) from prior year	SD	
40			Avoided Costs From IRP	SD	
41			Recorded kWh/kW Savings (Eng. Est.) from prior year	SD	
42			Shareholder Incentives (\$) to be Recovered	SD	SP
43		Forecast Preparation	Estimated kWh/kW Savings	SD	SF
44	Year 3	Lost Margin	Actual kWh/kW Savings (Eval. Results-Yr 3)	SM	SD & SF
45			Lost Margin (\$) Adjustment	SD	SP

C&I Energy Efficiency Program

1996

Activity: 10881
Energy Services Dept.

Expense Type	Sub-Activity	Cost Type	Notes	January	February	March	April	May	June	July	August	September	October	November	December	Total	Budgeted
Utilities	Rebates (\$77)	Financial Statement Items (800)	1	\$56,653	\$56,653	\$56,653	\$56,653	\$56,653	\$56,653	\$56,653	\$56,653	\$56,653	\$56,653	\$56,653	\$56,653	\$679,839	\$679,839
Direct Labor				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$44,451
Administration				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$54,053
Printing/Evaluation				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,604
Outside Services				\$54,342	\$54,342	\$54,342	\$54,342	\$54,342	\$54,342	\$54,342	\$54,342	\$54,342	\$54,342	\$54,342	\$54,342	\$652,104	\$163,521
Implementation																	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	2	\$43,092	\$43,092	\$43,092	\$43,092	\$43,092	\$43,092	\$43,092	\$43,092	\$43,092	\$43,092	\$43,092	\$43,092	\$517,104	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	3	\$4,167	\$4,167	\$4,167	\$4,167	\$4,167	\$4,167	\$4,167	\$4,167	\$4,167	\$4,167	\$4,167	\$4,167	\$50,000	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	4	\$7,083	\$7,083	\$7,083	\$7,083	\$7,083	\$7,083	\$7,083	\$7,083	\$7,083	\$7,083	\$7,083	\$7,083	\$85,000	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	5	\$21,711	\$21,711	\$21,711	\$21,711	\$21,711	\$21,711	\$21,711	\$21,711	\$21,711	\$21,711	\$21,711	\$21,711	\$260,531	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	6	\$20,461	\$20,461	\$20,461	\$20,461	\$20,461	\$20,461	\$20,461	\$20,461	\$20,461	\$20,461	\$20,461	\$20,461	\$245,531	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	7	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$15,000	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	8	\$18,431	\$18,431	\$18,431	\$18,431	\$18,431	\$18,431	\$18,431	\$18,431	\$18,431	\$18,431	\$18,431	\$18,431	\$184,308	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	9	\$18,431	\$18,431	\$18,431	\$18,431	\$18,431	\$18,431	\$18,431	\$18,431	\$18,431	\$18,431	\$18,431	\$18,431	\$184,308	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	10	\$6,258	\$6,258	\$6,258	\$6,258	\$6,258	\$6,258	\$6,258	\$6,258	\$6,258	\$6,258	\$6,258	\$6,258	\$89,141	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	11	\$265	\$265	\$265	\$265	\$265	\$265	\$265	\$265	\$265	\$265	\$265	\$265	\$3,175	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	12	\$967	\$967	\$967	\$967	\$967	\$967	\$967	\$967	\$967	\$967	\$967	\$967	\$11,601	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	13	\$208	\$208	\$208	\$208	\$208	\$208	\$208	\$208	\$208	\$208	\$208	\$208	\$2,500	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	14	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$9,000	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	15	\$3,605	\$3,605	\$3,605	\$3,605	\$3,605	\$3,605	\$3,605	\$3,605	\$3,605	\$3,605	\$3,605	\$3,605	\$43,255	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	16	\$6,500	\$6,500	\$6,500	\$6,500	\$6,500	\$6,500	\$6,500	\$6,500	\$6,500	\$6,500	\$6,500	\$6,500	\$78,670	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	17	\$330	\$330	\$330	\$330	\$330	\$330	\$330	\$330	\$330	\$330	\$330	\$330	\$3,960	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	18	\$1,483	\$1,483	\$1,483	\$1,483	\$1,483	\$1,483	\$1,483	\$1,483	\$1,483	\$1,483	\$1,483	\$1,483	\$17,810	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	19	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$1,000	
Implementation	Implementations (584)	Outside Services Temp Hire (503)	20	\$157,495	\$157,495	\$157,495	\$157,495	\$157,495	\$157,495	\$157,495	\$157,495	\$157,495	\$157,495	\$157,495	\$157,495	\$1,868,423	
Total				\$683,883	\$683,883	\$683,883	\$683,883	\$683,883	\$683,883	\$683,883	\$683,883	\$683,883	\$683,883	\$683,883	\$683,883	\$8,166,423	

8/1/96

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6:46:10 AM Thursday, February 14, 1996

HIECO

Calculation of Unit Lost Margin Amounts

Line Schedule	Base Energy Charge (Cents/kWh)	Base Demand Charge (\$/kW)	Interim Rate Increase (Percent)	Present Base Energy Rate (Cents/kWh)	Present Demand Charge (\$/kW)	Fuel in Base Energy Rate	Variable O&M	Unit Lost Margin Energy (Cents/kWh)	Unit Lost Margin Demand (\$/kW)
1 R-Residential Service	10.1810	0.00	5.53%	10.7440	0.000	3.688	0.081	6.9753	0.000
2 G-General Service	10.5763	0.00	5.53%	11.1612	0.000	3.688	0.081	7.3924	0.000
3 J-General Service Demand	7.6706	5.50	5.53%	8.0948	5.804	3.688	0.081	4.3260	5.804
4 I-Commercial Service	7.8701	6.00	5.53%	8.3053	6.332	3.688	0.081	4.5366	6.332
5 P-Large Power Service	6.6875	7.2103	5.53%	7.0574	7.609	3.688	0.081	3.2886	7.609
			6	7	8	9	10	11	12

Notes:

- 1 Docket No. 6998, Attachment C, Page 2.
- 2 Docket No. 6998, Attachment C, Page 11.
- 3 Docket No. 6998, Attachment C, Page 18 and Billing Block Calculations.
- 4 Docket No. 6998, Attachment C, Page 52.
- 5 Billing Block Calculations.
- 6 Decision and Order 13196, Docket No. 7700.
- 7 Base energy charge times interim rate increase.
- 8 Base demand charge times interim rate increase.
- 9 Decision and Order 11699, Docket No. 6898, will need latest approved rate case information.
- 10 From Variable O&M worksheet.
- 11 Present base energy rate less fuel in base rate less variable O&M.
- 12 Present demand charge.

beckling vls

RECO

Billing Block Calculations

Schedule J - General Service Demand

<u>A</u>	<u>E</u>	<u>C</u>	<u>D</u>
			Weighted
<u>Block</u>	<u>Block Price</u>	<u>Percentage of Energy</u>	<u>Average Price</u>
0-200 kWh/kW	8.2140	60.06%	7.6706
201-400 kWh/kW	7.0660	31.68%	
>400 kWh/kW	6.0370	8.25%	

Column B Docket No. 6998, Attachment C, Page 17

Column C Calculated from kWh distribution in Docket No. 6998, Attachment C, Page 17

Column D Weighted average of block price using bill weights

} Will need latest rate case information

Schedule P - Large Power Service

<u>A</u>	<u>E</u>	<u>C</u>	<u>D</u>
			Weighted
<u>Block</u>	<u>Block Price</u>	<u>Percentage of Energy</u>	<u>Average Price</u>
0-200 kWh/kW	7.1890	43.88%	6.6675
201-400 kWh/kW	6.3910	38.71%	
>400 kWh/kW	6.0830	17.41%	

Column B Docket No. 6998, Attachment C, Page 57

Column C Calculated from kWh distribution in Docket No. 6998, Attachment C, Page 57

Column D Weighted average of block price using energy weights

} Will need latest rate case information

Schedule P - Large Power Service

<u>A</u>	<u>E</u>	<u>C</u>	<u>D</u>
			Weighted
<u>Block</u>	<u>Block Price</u>	<u>Percentage of Demand</u>	<u>Average Price</u>
0-500 kW	8.00	33.34%	7.2103
501-1500 kW	7.50	21.02%	
>1500 kW	6.50	45.64%	

Column B Docket No. 6998, Attachment C, Page 57

Column C Calculated from kW distribution in Docket No. 6998, Attachment C, Page 57

Column D Weighted average of block price using bill weights

} Will need latest rate case information

Attachment C
Page 3 of 5

Calculation of Aggregate Unit Lost Margin

NECO-0501
Docket 05-0010
Page 2 of 2

Projected Sales by Rate Schedule
From Recommended 1993-2013 Sales Forecast (GWh)
Sales Forecast Without DSM
Schedule GJ Split from 1992-1997 Sales, Peak and Purchase Power Forecast/1997-2012 Long Range Peak Forecast: September 1992; Exhibit 2

Will need latest information

	Sch R		Sch G		Sch J		Sch H		Sch P		Unit Lost Margin Weighted Average Demand	
	GWh	% of Com	Energy (Cents/AWh) (11)	Demand (\$/Coincident kW mo.) (12)								
1995	1,720	0.00%	302	8.95%	1,165	22.98%	327	8.48%	3,278	64.64%	3.8513	9.816
1996	1,728	0.00%	307	8.94%	1,188	22.93%	331	8.40%	3,348	64.74%	3.8500	9.817
1997	1,740	0.00%	318	8.87%	1,220	23.07%	335	8.34%	3,418	64.82%	3.8521	9.812
1998	1,757	0.00%	327	8.83%	1,264	23.30%	340	8.26%	3,483	64.40%	3.8562	9.804
1999	1,778	0.00%	341	8.13%	1,318	23.85%	344	8.16%	3,570	64.06%	3.8623	9.782
2000	1,803	0.00%	358	8.22%	1,375	24.01%	347	8.08%	3,648	63.71%	3.8685	9.780
2001	1,825	0.00%	372	8.23%	1,438	24.43%	351	8.98%	3,718	63.27%	3.8763	9.765
2002	1,848	0.00%	388	8.44%	1,489	24.85%	355	8.90%	3,788	62.82%	3.8841	9.751
2003	1,870	0.00%	405	8.58%	1,555	25.28%	360	8.91%	3,861	62.38%	3.8920	9.737
2004	1,894	0.00%	423	8.66%	1,634	25.71%	364	8.73%	3,934	61.91%	3.9000	9.722
2005	1,917	0.00%	442	8.77%	1,705	26.14%	369	8.65%	4,008	61.44%	3.9081	9.708
2006	1,944	0.00%	459	8.87%	1,772	26.53%	372	8.57%	4,077	61.02%	3.9152	9.695
2007	1,971	0.00%	477	8.97%	1,841	26.92%	376	8.50%	4,146	60.62%	3.9225	9.681
2008	1,998	0.00%	495	7.07%	1,913	27.31%	380	8.42%	4,217	60.20%	3.9298	9.668
2009	2,025	0.00%	515	7.17%	1,987	27.70%	384	8.35%	4,288	59.78%	3.9371	9.655
2010	2,053	0.00%	535	7.28%	2,065	28.10%	387	8.27%	4,361	59.38%	3.9448	9.641
2011	2,083	0.00%	553	7.36%	2,137	28.43%	391	8.20%	4,438	58.91%	3.9508	9.630
2012	2,133	0.00%	573	7.46%	2,212	28.76%	394	8.13%	4,511	58.46%	3.9567	9.618
2013	2,175	0.00%	593	7.54%	2,288	29.10%	398	8.06%	4,588	58.11%	3.9628	9.607
	Unit Lost Margin Energy Demand (c/AWh) (AWh) 6.9753 0.000		Unit Lost Margin Energy Demand (c/AWh) (AWh) 7.3924 0.000		Unit Lost Margin Energy Demand (c/AWh) (AWh) 4.3280 8.804		Unit Lost Margin Energy Demand (c/AWh) (AWh) 4.5368 8.332		Unit Lost Margin Energy Demand (c/AWh) (AWh) 3.2886 7.809		Coincidence Factor: 44.27%	

Notes:

- For each commercial rate schedule (G, J, H, P) the rate schedule's gross unit lost margin is weighted by its relative sales level in each year to determine the overall unit lost margin. Gross (rather than Net) unit lost margin is used because energy and demand savings are already scaled down by the net-to-gross ratio. Using Net unit lost margin would double count free ridership. Coincidence factors are used to scale system coincident impacts to customer level impacts.

2 Will need latest coincidence factor information from Class Load Study.

HECO

Variable O&M
Cents/kWh

<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
<u>Line</u>	<u>Element</u>	<u>On-Peak</u>	<u>Off-Peak</u>	<u>Weighted Amount</u>
1	O&M	0.040	0.032	0.037
2	Working Cash	0.020	0.013	0.017
3	Fuel Inventor	0.027	0.027	0.027
4	Total	0.087	0.072	0.081

Source

Line 1	Docket No. 7310, Exhibit D, Page 1, Line 2	} Are these values updated regularly?
Line 2	Docket No. 7310, Exhibit D, Page 5, Line 8	
Line 3	Docket No. 7310, Exhibit D, Page 1, Line 4	

Column E Weighted by number of hours on-peak vs. off-peak per Docket No. 7310, page 9.

Attachment C
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~~ATTACHMENT D~~
PAGE 1 OF 1

iblist
M.P. # 00
08/15/00

HAWAIIAN ELECTRIC COMPANY, INC.

RECOMMENDED 1995-2010 SALES FORECAST (GWH)

Actual Effect	1992	1993	1994	1995	1996	1997	1998	2000	2005	2010	2015
Sales Forecast Without DSM											
R	1723.3	1713.7	1711.4	1719.9	1726.2	1740.3	1756.7	1802.5	1917.2	2053.4	2174.3
		-0.6%	-0.1%	0.5%	0.4%	0.8%	0.9%	1.0%	1.2%	1.4%	1.5%
G	1365.2	1376.5	1420.3	1466.4	1482.8	1536.1	1551.4	1731.2	2147.1	2599.7	2862.2
		0.8%	3.2%	3.2%	1.2%	2.9%	3.6%	4.0%	4.4%	3.9%	3.3%
H	322.2	322.8	322.7	327.0	331.0	325.1	325.8	347.3	368.8	387.4	396.3
		-0.2%	0.0%	1.0%	1.2%	1.2%	1.4%	1.1%	1.2%	1.0%	0.5%
P	3170.3	3178.6	3214.7	3275.0	3347.9	3418.2	3483.4	3648.8	4008.9	4361.4	4627.8
		0.3%	1.2%	2.0%	2.1%	2.1%	2.2%	2.2%	1.9%	1.7%	1.7%
Alamahu Airport F Adjusted	-0.5	-16.7	-18.0	-18.0	-18.0	-18.0	-18.0	-18.0	-18.0	-18.0	-18.0
		17.8	25.1	25.1	25.1	25.7	25.7	25.7	25.7	25.7	25.7
F Adjusted	3169.8	3177.7	3231.8	3296.1	3364.7	3458.9	3538.3	3702.1	4109.1	4461.6	4687.8
		0.2%	1.7%	2.0%	2.7%	2.2%	2.3%	2.3%	2.1%	1.7%	1.7%
F	35.9	40.2	40.5	40.8	41.1	41.4	41.7	42.3	43.8	45.4	46.4
		0.8%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
TOT	6634.4	6622.1	6727.7	6850.2	6975.8	7111.8	7267.5	7825.4	8565.8	9547.5	10189.0
		0.0%	1.4%	1.8%	1.8%	1.9%	2.2%	2.4%	2.4%	2.1%	2.2%
Less DSM (Res/Comm Lighting Pkts and DSM Action Plan Programs - See Exhibit 1E)											
R	0.0	0.1	10.5	17.4	33.2	54.6	78.7				
G	0.1	0.8	1.9	2.8	5.0	8.1	11.8				
H	0.0	0.1	0.1	0.1	0.1	0.1	0.1				
P	1.3	8.2	22.8	31.4	52.2	82.4	117.5				
F	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
	1.4	9.0	25.7	51.7	90.5	145.2	206.1	376.8	780.0	1002.2	1078.4
Sales Forecast Less DSM											
R	1723.3	1713.6	1700.9	1702.5	1693.0	1685.7	1678.0				
		-0.6%	-0.8%	0.1%	-0.6%	-0.4%	-0.5%				
G	1365.1	1376.3	1418.4	1463.6	1487.8	1528.0	1575.6				
		0.5%	3.1%	3.2%	1.7%	2.7%	3.4%				
H	322.2	322.5	322.6	326.9	330.9	325.0	326.7				
		-0.2%	0.0%	1.0%	1.2%	1.2%	1.4%				
P	3169.0	3188.4	3191.9	3247.5	3295.7	3365.8	3475.9				
		0.6%	0.7%	1.7%	1.5%	1.9%	1.9%				
Alamahu Airport F Adjusted	-0.5	-16.7	-18.0	-18.0	-18.0	-18.0	-18.0				
		17.8	25.1	25.1	25.7	25.7	25.7				
F Adjusted	3168.5	3189.5	3206.0	3264.7	3322.5	3397.8	3497.8				
		0.6%	1.0%	1.7%	2.1%	1.9%	1.9%				
F	35.9	40.2	40.5	40.8	41.1	41.4	41.7				
		0.8%	0.7%	0.7%	0.7%	0.7%	0.7%				
TOT	6623.0	6621.1	6621.0	6736.5	6861.0	6961.0	7069.8	7748.6	8545.8	9545.2	10110.6
		-0.0%	0.0%	1.6%	1.8%	1.5%	1.5%	1.9%	1.9%	1.9%	2.0%

7/25/95

HAWAIIAN ELECTRIC COMPANY, INC.				
DSM PROGRAMS				
SUMMARY OF COSTS TO BE RECOVERED				
	Program Costs	Lost Margin	Shareholder Incentives	Total
Docket No. 94-0010 Commercial & Industrial New Construction Program				0
Docket No. 94-0011 Commercial & Industrial Customized Rebate Program				0
Docket No. 94-0012 Commercial & Industrial Energy Efficiency Program				0
Docket No. 94-0206 Residential Efficient Water Heating Program				0
Docket No. 94-0216 Residential New Construction Program				0
TOTAL DSM PROGRAMS	0	0	0	0

CA-IR-109

Ref: HELCO-WP-801, page 3, Demand Side Management “DSM” Expense Element 900 Entries.

Please provide an explanatory analysis of the Company’s accounting for DSM costs and any deferrals/amortization associated with same, for the years 2000 through 2005, including in such analysis supporting calculations for the expense element 900 amounts shown in each year of recorded data.

HELCO Response:

On an annual basis, the HECO Energy Services Pricing Division prepares the breakdown of the DSM surcharge, by rate schedule and by year of the components of program cost, lost margin, shareholder incentives, interest, and revenue taxes for the prior years.

Each month, the HECO Forecasts and Research Division prepares the DSM Revenue Recovery by Rate and Component Report, using the REV510 report, unbilled spreadsheet report and the breakdown of the DSM surcharge information from the HECO Pricing Division.

HELCO prepares a monthly journal entry to record the current month’s reversal of prior year’s costs of DSM costs collected, lost margin collected, interest on prior years’ DSM costs and shareholder incentives, by using the DSM Revenue Recovery by Rate and Component Report. The journal entry also defers the recognition of the current month’s incremental program costs and amortizes the deferred program costs based on the current month’s collections. This journal entry is shown using activity 713 and expense element 900. A regulatory asset occurs when expenses for the current year are in excess of revenues.

The Lost Margin on Installations and Earned Shareholder Incentive amounts, as part of the DSM Cost Recovery docket are approved by HECO Energy Services Pricing Division and the HECO Regulatory Affairs Department and filed with the PUC.

HELCO prepares a monthly DSM Lost Margin and Shareholder Incentive journal entry utilizing the year-to-date Lost Margin on Installations Approved and year-to-date Earned Shareholder Incentives before tax amount prepared by the HECO Energy Services Pricing Division.

Expenses with activity 714 and expense element 900 are DSM program incentives paid to customers.

Attached as pages 3 through 40 are the June 2006 journal entry, DSM Revenue Recovery by Rate and Component Report, and as pages 41-54 are the Recorded Lost Margin and Earned Shareholder Incentives information.

Hawaii Electric Light Company, Inc.
 DSM Revenue Reconciliation
 2000 Program Year
 For June 2006

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All Info From DSM Report From Jeannine Villanueva

	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
PROGRAM COST ONLY -						
Revenues Collected From Ratepayers						
Schedule R	0				0	0
Schedule E	0				0	0
Schedule G		(0)	0	0	(0)	(0)
Schedule J		(0)	0	0	(0)	(0)
Schedule U		0	0	0	0	0
Schedule H		(0)	0	0	(0)	(0)
Schedule K		(0)	0	0	(0)	(0)
Schedule P		(0)	0	0	(0)	(0)
Totals	0.44	(0.53)	0	0	(1)	(0)
RA (Liability) @ 05/31/06 - Per G/L	267,655				180,483	448,138
Add: Curr Mo JE To Defer Program Costs	0				0	0
RA (Liability) @ 06/30/06 - S/B	267,655				180,484	448,139
Difference - Credit DSM Program Cost Revenue	0				(1)	(0)
- Debit Regulatory Liability	(0)				1	0

Hawaii Electric Light Company, Inc.
 DSM Revenue Reconciliation
 2000 Program Year
 For June 2006

	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
INTEREST ON UNDERCOLLECTION -						
Revenues To Be Collected (Returned) From (To) Ratepayers						
Schedule R	8				0	8
Schedule E	0				0	0
Schedule G		(0)	0	0	(0)	(0)
Schedule J		(0)	0	0	(0)	(0)
Schedule U		0	0	0	0	0
Schedule H		(0)	0	0	(0)	(0)
Schedule K		(0)	0	0	(0)	(0)
Schedule P		(0)	0	0	(0)	(0)
Totals	7.75	(0.95)	0	0	(1)	7
RA (Liability) @ 05/31/06 - Per G/L	62,277				88,319	150,595
RA (Liability) @ 06/30/06 - S/B	62,269				88,320	150,589
Difference - Debit DSM Interest Income Revenue	(8)				1	(7)
- Credit Regulatory Asset	8				(1)	7

Hawaii Electric Light Company, Inc.
 DSM Revenue Reconciliation
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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
REVENUE TAXES ON PROGRAM COST ONLY -						
Revenues Collected From Ratepayers						
Schedule R	0				0	0
Schedule E	0				0	0
Schedule G		(0)	0	0	(0)	(0)
Schedule J		(0)	0	0	(0)	(0)
Schedule U		0	0	0	0	0
Schedule H		0	0	0	0	0
Schedule K		0	0	0	0	0
Schedule P		(0)	0	0	(0)	(0)
Totals	0.05	(0.05)	0	0	(0)	0
RA (Liability) @ 05/31/06 - Per G/L	(33,360)				(70,911)	(104,271)
RA (Liability) @ 06/30/06 - S/B	(33,360)				(70,911)	(104,271)
Difference - Debit DSM Revenue Tax Revenue:	0				(0)	0
- Credit Regulatory Asset	(0)				0	0

Hawaii Electric Light Company, Inc.
 DSM Revenue Reconciliation
 2000 Program Year
 For June 2006

	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
LOST MARGINS ONLY -						
Revenues Collected From Ratepayers						
Schedule R	231				0	231
Schedule E	1				0	1
Schedule G		(6)	0	0	(6)	(6)
Schedule J		(17)	0	0	(17)	(17)
Schedule U		(0)	0	0	(0)	(0)
Schedule H		(0)	0	0	(0)	(0)
Schedule K		(0)	0	0	(0)	(0)
Schedule P		(13)	0	0	(13)	(13)
Totals	232.33	(37.12)	0	0	(37)	195
RA (Liability) @ 05/31/06 - Per G/L	867,685				(172,156)	695,529
Add: Current Month JE To Record Loss Margin	0				0	0
RA (Liability) @ 06/30/06 - S/B	867,453				(172,119)	695,334
Difference - Credit DSM Loss Margin Revenues	232				(37)	195
- Debit Regulatory Liability	(232)				37	(195)

Hawaii Electric Light Company, Inc.
 DSM Revenue Reconciliation
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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
SHAREHOLDER INCENTIVES -						
Revenues Collected From Ratepayers						
Schedule R	(0)				0	(0)
Schedule E	0				0	0
Schedule G		0	0	0	0	0
Schedule J		0	0	0	0	0
Schedule U		0	0	0	0	0
Schedule H		0	0	0	0	0
Schedule K		0	0	0	0	0
Schedule P		0	0	0	0	0
Totals	(0.23)	0.92	0	0	1	1
RA (Liability) @ 05/31/06 - Per G/L	(211,290)				(321,625)	(532,914)
Add: Current Month JE To Record S/H Incentiv	0				0	0
RA (Liability) @ 06/30/06 - S/B	(211,290)				(321,625)	(532,915)
Difference - Credit DSM Shareholder Incentive	(0)				1	1
- Debit Regulatory Asset	0				(1)	(1)

Hawaii Electric Light Company, Inc.
 DSM Revenue Reconciliation
 2001 Program Year
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All Info From DSM Report From Jeannine Villanueva

	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
PROGRAM COST ONLY -						
Revenues Collected From Ratepayers						
Schedule R	(2)				0	(2)
Schedule E	(0)				0	(0)
Schedule G		0	0	0	0	0
Schedule J		0	0	0	0	0
Schedule U		0	0	0	0	0
Schedule H		0	0	0	0	0
Schedule K		0	0	0	0	0
Schedule P		0	0	0	0	0
Totals	(1.56)	0.96	0	0	1	(1)
RA (Liability) @ 05/31/06 - Per G/L	(1,465,944)				(525,774)	(1,991,715)
Add: Curr Mo JE To Defer Program Costs	0				0	0
RA (Liability) @ 06/30/06 - S/B	(1,465,942)				(525,772)	(1,991,714)
Difference - Debit DSM Prog Cost Exp	(2)				1	(1)
- Credit Regulatory Asset	2				(1)	1

Hawaii Electric Light Company, Inc.
 DSM Revenue Reconciliation
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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
INTEREST ON UNDERCOLLECTION -						
Revenues To Be Collected (Returned) From (To) Ratepayers						
Schedule R	59				0	59
Schedule E	0				0	0
Schedule G		(2)	0	0	(2)	(2)
Schedule J		(5)	0	0	(5)	(5)
Schedule U		(0)	0	0	(0)	(0)
Schedule H		(0)	0	0	(0)	(0)
Schedule K		(0)	0	0	(0)	(0)
Schedule P		(4)	0	0	(4)	(4)
Totals	59.61	(11.16)	0	0	(11)	48
RA (Liability) @ 05/31/06 - Per G/L	12,341				14,350	26,690
RA (Liability) @ 06/30/06 - S/B	12,281				14,361	26,642
Difference - Debit DSM Interest Income Revent	(60)				11	(48)
- Credit Regulatory Asset	60				(11)	48

Hawaii Electric Light Company, Inc.
 DSM Revenue Reconciliation
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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
REVENUE TAXES ON PROGRAM COST ONLY -						
Revenues Collected From Ratepayers						
Schedule R	(0)				0	(0)
Schedule E	0				0	0
Schedule G		0	0	0	0	0
Schedule J		0	0	0	0	0
Schedule U		0	0	0	0	0
Schedule H		0	0	0	0	0
Schedule K		0	0	0	0	0
Schedule P		0	0	0	0	0
Totals	(0.15)	0.11	0	0	0	(0)
RA (Liability) @ 05/31/06 - Per G/L	(142,929)				(51,264)	(194,193)
RA (Liability) @ 06/30/06 - S/B	(142,929)				(51,264)	(194,193)
Difference - Debit DSM Revenue Tax Revenue:	(0)				0	(0)
- Credit Regulatory Asset	0				(0)	0

Hawaii Electric Light Company, Inc.
 DSM Revenue Reconciliation
 2001 Program Year
 For June 2006

	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
LOST MARGINS ONLY -						
Revenues Collected From Ratepayers						
Schedule R	808				0	808
Schedule E	5				0	5
Schedule G		(24)			(24)	(24)
Schedule J		(74)			(74)	(74)
Schedule U		(0)			(0)	(0)
Schedule H		(2)			(2)	(2)
Schedule K		(2)			(2)	(2)
Schedule P		(56)			(56)	(56)
Totals	813.52	(157.68)	0	0	(158)	656
RA (Liability) @ 05/31/06 - Per G/L	(261,558)				(252,850)	(514,408)
Add: Current Month JE To Record Loss Margin	0				0	0
RA (Liability) @ 06/30/06 - S/B	(262,372)				(252,692)	(515,064)
Difference - Debit DSM Loss Margins Revenue:	814				(158)	656
- Credit DSM Regulatory Asset	(814)				158	(656)

Hawaii Electric Light Company, Inc.
 DSM Revenue Reconciliation
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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
SHAREHOLDER INCENTIVES -						
Revenues Collected From Ratepayers						
Schedule R	1,528				0	1,528
Schedule E	10				0	10
Schedule G		(49)	0	0	(49)	(49)
Schedule J		(151)	0	0	(151)	(151)
Schedule U		(1)	0	0	(1)	(1)
Schedule H		(3)	0	0	(3)	(3)
Schedule K		(4)	0	0	(4)	(4)
Schedule P		(114)	0	0	(114)	(114)
Totals	1,537.44	(322.02)	0	0	(322)	1,215
RA (Liability) @ 05/31/06 - Per G/L	(76,079)				(267,920)	(343,999)
Add: Current Month JE To Record S/H Incentiv	0				0	0
RA (Liability) @ 06/30/06 - S/B	(77,617)				(267,598)	(345,215)
Difference - Credit Regulatory Asset	1,537				(322)	1,215
- Debit DSM Shareholder Incentive Re	(1,537)				322	(1,215)

Hawaii Electric Light Company, Inc.
 DSM Revenue Reconciliation
 2002 Program Year
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All Info From DSM Report From Jeannine Villanueva

	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
PROGRAM COST ONLY -						
Revenues Collected From Ratepayers						
Schedule R	2				0	2
Schedule E	0				0	0
Schedule G		3			3	3
Schedule J		9			9	9
Schedule U		0			0	0
Schedule H		0			0	0
Schedule K		0			0	0
Schedule P		7			7	7
Totals	1.88	19.64	0	0	20	22
RA (Liability) @ 05/31/06 - Per G/L	(563,481)				543,724	(19,757)
Add: Curr Mo JE To Defer Program Costs	0				0	0
RA (Liability) @ 06/30/06 - S/B	(563,483)				543,704	(19,779)
Difference - Debit DSM Prog Cost Exp	2				20	22
- Credit Regulatory Asset	(2)				(20)	(22)

Hawaii Electric Light Company, Inc.
 DSM Revenue Reconciliation
 2002 Program Year
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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
INTEREST ON UNDERCOLLECTION -						
Revenues To Be Collected (Returned) From (To) Ratepayers						
Schedule R	168				0	168
Schedule E	1				0	1
Schedule G		(4)	0	0	(4)	(4)
Schedule J		(14)	0	0	(14)	(14)
Schedule U		(0)	0	0	(0)	(0)
Schedule H		(0)	0	0	(0)	(0)
Schedule K		(0)	0	0	(0)	(0)
Schedule P		(10)	0	0	(10)	(10)
Totals	169.48	(29.29)	0	0	(29)	140
RA (Liability) @ 05/31/06 - Per G/L	(21,688)				(2,833)	(24,522)
RA (Liability) @ 06/30/06 - S/B	(21,858)				(2,804)	(24,662)
Difference - Debit DSM Interest Income Revenu	(169)				29	(140)
- Credit Regulatory Asset	169				(29)	140

Hawaii Electric Light Company, Inc.
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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
REVENUE TAXES ON PROGRAM COST ONLY -						
Revenues Collected From Ratepayers						
Schedule R	0				0	0
Schedule E	0				0	0
Schedule G		0			0	0
Schedule J		1			1	1
Schedule U		0			0	0
Schedule H		0			0	0
Schedule K		0			0	0
Schedule P		1			1	1
Totals	0.18	1.91	0	0	2	2
RA (Liability) @ 05/31/06 - Per G/L	(54,939)				(47,318)	(102,257)
RA (Liability) @ 06/30/06 - S/B	(54,939)				(47,320)	(102,259)
Difference - Debit DSM Revenue Tax Revenue:	0				2	2
- Credit Regulatory Asset	(0)				(2)	(2)

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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
LOST MARGINS ONLY -						
Revenues Collected From Ratepayers						
Schedule R	1,185				0	1,185
Schedule E	8				0	8
Schedule G		(17)			(17)	(17)
Schedule J		(52)			(52)	(52)
Schedule U		(0)			(0)	(0)
Schedule H		(1)			(1)	(1)
Schedule K		(1)			(1)	(1)
Schedule P		(39)			(39)	(39)
Totals	1,193.03	(111.28)	0	0	(111)	1,082
RA (Liability) @ 05/31/06 - Per G/L	(182,388)				(339,516)	(521,904)
Add: Curr Mo JE To Record Loss Margins	0				0	0
RA (Liability) @ 06/30/06 - S/B	(183,581)				(339,627)	(522,986)
Difference - Debit DSM Loss Margins Revenue:	1,193				(111)	1,082
- Credit DSM Regulatory Asset	(1,193)				111	(1,082)

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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
SHAREHOLDER INCENTIVES -						
Revenues Collected From Ratepayers						
Schedule R	0				0	0
Schedule E	0				0	0
Schedule G		(4)	0	0	(4)	(4)
Schedule J		(11)	0	0	(11)	(11)
Schedule U		(0)	0	0	(0)	(0)
Schedule H		(0)	0	0	(0)	(0)
Schedule K		(0)	0	0	(0)	(0)
Schedule P		(9)	0	0	(9)	(9)
Totals	0	(24.57)	0	0	(25)	(25)
RA (Liability) @ 05/31/06 - Per G/L					35,415	35,415
Add: Curr Mo JE To Record S/H Incentives	0				0	0
RA (Liability) @ 06/30/06 - S/B	0				35,391	35,391
Difference - Credit Regulatory Asset	0				(25)	(25)
- Debit DSM Shareholder Incentive Re	0				25	25

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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
PROGRAM COST ONLY -						
Revenues Collected From Ratepayers						
Schedule R	(175)				0	(175)
Schedule E	(1)				0	(1)
Schedule G		(44)			(44)	(44)
Schedule J		(136)			(136)	(136)
Schedule U		(1)			(1)	(1)
Schedule H		(3)			(3)	(3)
Schedule K		(4)			(4)	(4)
Schedule P		(103)			(103)	(103)
Totals	(175.75)	(291.86)	0	0	(292)	(468)
RA (Liability) @ 05/31/06 - Per G/L	(709,522)				(525,321)	(1,234,844)
Add: Curr Mo JE To Defer Program Costs	0				0	0
RA (Liability) @ 06/30/06 - S/B	(709,347)				(525,029)	(1,234,376)
Difference - Debit DSM Prog Cost Exp	(176)				(292)	(468)
- Credit Regulatory Asset	176				292	468

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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
INTEREST ON UNDERCOLLECTION -						
Revenues To Be Collected (Returned) From (To) Ratepayers						
Schedule R	(291)				0	(291)
Schedule E	(2)				0	(2)
Schedule G		3	0	0	3	3
Schedule J		9	0	0	9	9
Schedule U		0	0	0	0	0
Schedule H		0	0	0	0	0
Schedule K		0	0	0	0	0
Schedule P		7	0	0	7	7
Totals	(293.12)	18.63	0	0	19	(274)
RA (Liability) @ 05/31/06 - Per G/L	(82,590)				(20,216)	(102,806)
RA (Liability) @ 06/30/06 - S/B	(82,296)				(20,235)	(102,531)
Difference - Debit DSM Interest Income Revenu	293				(19)	274
- Credit Regulatory Asset	(293)				19	(274)

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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
REVENUE TAXES ON PROGRAM COST ONLY -						
Revenues Collected From Ratepayers						
Schedule R	(17)				0	(17)
Schedule E	(0)				0	(0)
Schedule G		(4)			(4)	(4)
Schedule J		(13)			(13)	(13)
Schedule U		(0)			(0)	(0)
Schedule H		(0)			(0)	(0)
Schedule K		(0)			(0)	(0)
Schedule P		(10)			(10)	(10)
Totals	(17.13)	(28.45)	0	0	(28)	(46)
RA (Liability) @ 05/31/06 - Per G/L	(69,179)				(40,871)	(110,050)
RA (Liability) @ 06/30/06 - S/B	(69,162)				(40,843)	(110,004)
Difference - Debit DSM Revenue Tax Revenue:	(17)				(28)	(46)
- Credit Regulatory Asset	17				28	46

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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
LOST MARGINS ONLY -						
Revenues Collected From Ratepayers						
Schedule R	1,331				0	1,331
Schedule E	9				0	9
Schedule G		20			20	20
Schedule J		60			60	60
Schedule U		0			0	0
Schedule H		1			1	1
Schedule K		2			2	2
Schedule P		46			46	46
Totals	1,339.10	129.17	0	0	129	1,468
RA (Liability) @ 05/31/06 - Per G/L	(290,722)				(677,629)	(968,352)
Add: Current Month JE To Record Loss Margin	0				0	0
RA (Liability) @ 06/30/06 - S/B	(292,062)				(677,759)	(969,820)
Difference - Debit DSM Loss Margins Revenue:	1,339				129	1,468
- Credit DSM Regulatory Asset	(1,339)				(129)	(1,468)

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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
SHAREHOLDER INCENTIVES -						
Revenues Collected From Ratepayers						
Schedule R	0				0	0
Schedule E	0				0	0
Schedule G		163	0	0	163	163
Schedule J		501	0	0	501	501
Schedule U		3	0	0	3	3
Schedule H		11	0	0	11	11
Schedule K		13	0	0	13	13
Schedule P		380	0	0	380	380
Totals	0	1,071.82	0	0	1,072	1,072
RA (Liability) @ 05/31/06 - Per G/L	0				(267,375)	(267,375)
Add: Current Month JE To Record S/H Incentiv	0				0	0
RA (Liability) @ 06/30/06 - S/B	0				(268,446)	(268,446)
Difference - Credit Regulatory Asset	0				1,072	1,072
- Debit DSM Shareholder Incentive Re	0				(1,072)	(1,072)

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PROGRAM COST ONLY -						
Revenues Collected From Ratepayers						
Schedule R	729				0	729
Schedule E	5				0	5
Schedule G		(38)			(38)	(38)
Schedule J		(117)			(117)	(117)
Schedule U		(1)			(1)	(1)
Schedule H		(3)			(3)	(3)
Schedule K		(3)			(3)	(3)
Schedule P		(89)			(89)	(89)
Totals	733.42	(250.41)	0	0	(250)	483
RA (Liability) @ 05/31/06 - Per G/L	(816,430)				(895,211)	(1,711,641)
Add: Curr Mo JE To Defer Program Costs	0				0	0
RA (Liability) @ 06/30/06 - S/B	(817,164)				(894,960)	(1,712,124)
Difference - Debit DSM Prog Cost Exp	733				(250)	483
- Credit Regulatory Asset	(733)				250	(483)

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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
INTEREST ON UNDERCOLLECTION -						
Revenues To Be Collected (Returned) From (To) Ratepayers						
Schedule R	(903)				0	(903)
Schedule E	(6)				0	(6)
Schedule G		(169)	0	0	(169)	(169)
Schedule J		(518)	0	0	(518)	(518)
Schedule U		(3)	0	0	(3)	(3)
Schedule H		(12)	0	0	(12)	(12)
Schedule K		(14)	0	0	(14)	(14)
Schedule P		(392)	0	0	(392)	(392)
Totals	(909.14)	(1,107.92)	0	0	(1,108)	(2,017)
RA (Liability) @ 05/31/06 - Per G/L	919				1,098	2,017
RA (Liability) @ 06/30/06 - S/B	1,828				2,206	4,034
Difference - Debit DSM Interest Income Revenue	909				1,108	2,017
- Credit Regulatory Asset	(909)				(1,108)	(2,017)

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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
REVENUE TAXES ON PROGRAM COST ONLY -						
Revenues Collected From Ratepayers						
Schedule R	71				0	71
Schedule E	0				0	0
Schedule G		(4)			(4)	(4)
Schedule J		(11)			(11)	(11)
Schedule U		(0)			(0)	(0)
Schedule H		(0)			(0)	(0)
Schedule K		(0)			(0)	(0)
Schedule P		(9)			(9)	(9)
Totals	71.51	(24.42)	0	0	(24)	47
RA (Liability) @ 05/31/06 - Per G/L	(79,602)				(87,258)	(166,885)
RA (Liability) @ 06/30/06 - S/B	(79,673)				(87,258)	(166,932)
Difference - Debit DSM Revenue Tax Revenues	72				(24)	47
- Credit Regulatory Asset	(72)				24	(47)

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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
LOST MARGINS ONLY -						
Revenues Collected From Ratepayers						
Schedule R	444				0	444
Schedule E	3				0	3
Schedule G		708			708	708
Schedule J		2,175			2,175	2,175
Schedule U		14			14	14
Schedule H		49			49	49
Schedule K		58			58	58
Schedule P		1,648			1,648	1,648
Totals	446.91	4,651.58	0	0	4,652	5,098
RA (Liability) @ 05/31/06 - Per G/L	(460,770)				(1,281,792)	(1,742,552)
Add: Current Month JE To Record Loss Margin	0				0	0
RA (Liability) @ 06/30/06 - S/B	(461,217)				(1,286,434)	(1,747,650)
Difference - Debit DSM Loss Margins Revenues	447				4,652	5,098
- Credit DSM Regulatory Asset	(447)				(4,652)	(5,098)

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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
SHAREHOLDER INCENTIVES -						
Revenues Collected From Ratepayers						
Schedule R	0				0	0
Schedule E	0				0	0
Schedule G		171	0	0	171	171
Schedule J		525	0	0	525	525
Schedule U		3	0	0	3	3
Schedule H		12	0	0	12	12
Schedule K		14	0	0	14	14
Schedule P		398	0	0	398	398
Totals	0.00	1,122.75	0	0	1,123	1,123
RA (Liability) @ 05/31/06 - Per G/L	0				(107,276)	(107,276)
Add: Current Month JE To Record S/H Incentiv	0				0	0
RA (Liability) @ 06/30/06 - S/B	0				(108,399)	(108,399)
Difference - Credit Regulatory Asset	0				1,123	1,123
- Debit DSM Shareholder Incentive Re	0				(1,123)	(1,123)

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PROGRAM COST ONLY -						
Revenues Collected From Ratepayers						
Schedule R	(8,230)				0	(8,230)
Schedule E	(53)				0	(53)
Schedule G		(1,981)			(1,981)	(1,981)
Schedule J		(6,082)			(6,082)	(6,082)
Schedule U		(39)			(39)	(39)
Schedule H		(136)			(136)	(136)
Schedule K		(162)			(162)	(162)
Schedule P		(4,607)			(4,607)	(4,607)
Totals	(8,283.07)	(13,006.44)	0	0	(13,006)	(21,290)
RA (Liability) @ 05/31/06 - Per G/L	(485,993)				(519,427)	(1,005,420)
Add: Curr Mo JE To Defer Program Costs	0				0	0
RA (Liability) @ 06/30/06 - S/B	(477,709)				(506,421)	(984,130)
Difference - Debit DSM Prog Cost Exp	(8,283)				(13,006)	(21,290)
- Credit Regulatory Asset	8,283				13,006	21,290

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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
INTEREST ON UNDERCOLLECTION -						
Revenues To Be Collected (Returned) From (To) Ratepayers						
Schedule R	3,433				0	3,433
Schedule E	22				0	22
Schedule G		870	0	0	870	870
Schedule J		2,671	0	0	2,671	2,671
Schedule U		17	0	0	17	17
Schedule H		60	0	0	60	60
Schedule K		71	0	0	71	71
Schedule P		2,023	0	0	2,023	2,023
Totals	3,455	5,713	0	0	5,713	9,168
RA (Liability) @ 05/31/06 - Per G/L	(3,492)				(5,663)	(9,155)
RA (Liability) @ 06/30/06 - S/B	(6,947)				(11,375)	(18,323)
Difference - Debit DSM Interest Income Reven	(3,455)				(5,713)	(9,168)
- Credit Regulatory Asset	3,455				5,713	9,168

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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
REVENUE TAXES ON PROGRAM COST ONLY -						
Revenues Collected From Ratepayers						
Schedule R	(802)				0	(802)
Schedule E	(5)				0	(5)
Schedule G		(193)			(193)	(193)
Schedule J		(593)			(593)	(593)
Schedule U		(4)			(4)	(4)
Schedule H		(13)			(13)	(13)
Schedule K		(16)			(16)	(16)
Schedule P		(449)			(449)	(449)
Totals	(807.59)	(1,268.15)	0	0	(1,268)	(2,076)
RA (Liability) @ 05/31/06 - Per G/L	(47,384)				(50,644)	(98,029)
RA (Liability) @ 06/30/06 - S/B	(46,577)				(49,376)	(95,953)
Difference - Debit DSM Revenue Tax Revenue:	(808)				(1,268)	(2,076)
- Credit Regulatory Asset	808				1,268	2,076

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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
LOST MARGINS ONLY -						
Revenues Collected From Ratepayers						
Schedule R	(3,068)				0	(3,068)
Schedule E	(20)				0	(20)
Schedule G		2,303			2,303	2,303
Schedule J		7,071			7,071	7,071
Schedule U		45			45	45
Schedule H		158			158	158
Schedule K		188			188	188
Schedule P		5,356			5,356	5,356
Totals	(3,087.42)	15,121.99	0	0	15,122	12,035
RA (Liability) @ 05/31/06 - Per G/L	(298,715)				(839,242)	(1,137,957)
Add: Current Month JE To Record Loss Margir	0				0	0
RA (Liability) @ 06/30/06 - S/B	(295,627)				(854,364)	(1,149,991)
Difference - Debit DSM Loss Margins Revenue:	(3,087)				15,122	12,035
- Credit DSM Regulatory Asset	3,087				(15,122)	(12,035)

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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
SHAREHOLDER INCENTIVES -						
Revenues Collected From Ratepayers						
Schedule R	0				0	0
Schedule E	0				0	0
Schedule G		2,390	0	0	2,390	2,390
Schedule J		7,338	0	0	7,338	7,338
Schedule U		47	0	0	47	47
Schedule H		164	0	0	164	164
Schedule K		195	0	0	195	195
Schedule P		5,558	0	0	5,558	5,558
Totals	0	15,692	0	0	15,692	15,692
RA (Liability) @ 05/31/06 - Per G/L	0				(29,664)	(29,664)
Add: Current Month JE To Record S/H Incentiv	0				0	0
RA (Liability) @ 06/30/06 - S/B	0				(45,357)	(45,357)
Difference - Credit Regulatory Asset	0				15,692	15,692
- Debit DSM Shareholder Incentive R	0				(15,692)	(15,692)

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PROGRAM COST ONLY -						
Revenues Collected From Ratepayers						
Schedule R	58,422				0	58,422
Schedule E	377				0	377
Schedule G		7,690			7,690	7,690
Schedule J		23,608			23,608	23,608
Schedule U		151			151	151
Schedule H		529			529	529
Schedule K		628			628	628
Schedule P		17,883			17,883	17,883
Totals	58,799.59	50,488.35	0	0	50,488	109,288
RA (Liability) @ 05/31/06 - Per G/L	(119,265)				(95,441)	(214,706)
Add: Curr Mo JE To Defer Program Costs	0				0	0
RA (Liability) @ 06/30/06 - S/B	(178,064)				(145,929)	(323,994)
Difference - Debit DSM Prog Cost Exp	58,800				50,488	109,288
- Credit Regulatory Asset	(58,800)				(50,488)	(109,288)

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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
INTEREST ON UNDERCOLLECTION -						
Revenues To Be Collected (Returned) From (To) Ratepayers						
Schedule R	0				0	0
Schedule E	0				0	0
Schedule G		0	0	0	0	0
Schedule J		0	0	0	0	0
Schedule U		0	0	0	0	0
Schedule H		0	0	0	0	0
Schedule K		0	0	0	0	0
Schedule P		0	0	0	0	0
Totals	0	0	0	0	0	0
RA (Liability) @ 05/31/06 - Per G/L	0				0	0
RA (Liability) @ 06/30/06 - S/B	0				0	0
Difference - Debit DSM Interest Income Revenue	0				0	0
- Credit Regulatory Asset	0				0	0

Hawaii Electric Light Company, Inc.
 DSM Revenue Reconciliation
 2006 Program Year
 For June 2006

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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
REVENUE TAXES ON PROGRAM COST ONLY -						
Revenues Collected From Ratepayers						
Schedule R	5,696				0	5,696
Schedule E	37				0	37
Schedule G		750			750	750
Schedule J		2,302			2,302	2,302
Schedule U		15			15	15
Schedule H		52			52	52
Schedule K		61			61	61
Schedule P		1,744			1,744	1,744
Totals	5,732.95	4,922.61	0	0	4,923	10,656
RA (Liability) @ 05/31/06 - Per G/L	5,794				4,880	10,674
RA (Liability) @ 06/30/06 - S/B	61				(43)	18
Difference - Debit DSM Revenue Tax Revenues - Credit Regulatory Asset	5,733 (5,733)				4,923 (4,923)	10,656 (10,656)

Hawaii Electric Light Company, Inc.
 DSM Revenue Reconciliation
 2006 Program Year
 For June 2006

	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
LOST MARGINS ONLY -						
Revenues Collected From Ratepayers						
Schedule R	34,372				0	34,372
Schedule E	222				0	222
Schedule G		13,187			13,187	13,187
Schedule J		40,485			40,485	40,485
Schedule U		259			259	259
Schedule H		907			907	907
Schedule K		1,076			1,076	1,076
Schedule P		30,667			30,667	30,667
Totals	34,593.98	86,581.88	0	0	86,582	121,176
RA (Liability) @ 05/31/06 - Per G/L	(70,168)				(163,671)	(233,839)
Add: Current Month JE To Record Loss Margin	0				0	0
RA (Liability) @ 06/30/06 - S/B	(104,762)				(250,253)	(355,014)
Difference - Debit DSM Loss Margins Revenues - Credit DSM Regulatory Asset	34,594 (34,594)				86,582 (86,582)	121,176 (121,176)

Hawaii Electric Light Company, Inc.
 DSM Revenue Reconciliation
 2006 Program Year
 For June 2006

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	<u>REWH</u>	<u>CIEE</u>	<u>CINC</u>	<u>CICR</u>	<u>C & I Total</u>	<u>Grand Total</u>
SHAREHOLDER INCENTIVES -						
Revenues Collected From Ratepayers						
Schedule R	0				0	0
Schedule E	0				0	0
Schedule G		0	0	0	0	0
Schedule J		0	0	0	0	0
Schedule U		0	0	0	0	0
Schedule H		0	0	0	0	0
Schedule K		0	0	0	0	0
Schedule P		0	0	0	0	0
Totals	0	0	0	0	0	0
RA (Liability) @ 05/31/06 - Per G/L	0				0	0
Add: Current Month JE To Record S/H Incentiv	0				0	0
RA (Liability) @ 06/30/06 - S/B	0				0	0
Difference - Credit Regulatory Asset	0				0	0
- Debit DSM Shareholder Incentive Re	0				0	0

Hawaii Electric Light Company, Inc.
DSM Revenues - June 2006 Analysis

		<u>Debit</u>	<u>Credit</u>
HM073A			
1	DSM Revenues (Program Costs) - Sch R	44001066	0
	Regulatory Liability (Program Costs) - REWH	18670160	0
To record return in 2006 on 2000 REWH program cost revenue overcollection.			
2	DSM Revenues (Program Costs) - Sch G	44201066	(0)
	DSM Revenues (Program Costs) - Sch H	44204066	(0)
	DSM Revenues (Program Costs) - Sch P	44206066	(0)
	Regulatory Liability (Program Costs) - C&I	18670160	(1)
To record return in 2006 on 2000 C&I program cost revenue overcollection.			
3	DSM Revenues (Revenue Taxes) - Sch R	44001066	0
	Regulatory Liability (Revenue Taxes) - REWH	18670160	0
To record return in 2006 on 2000 REWH revenue taxes on program cost revenue overcollection.			
4	DSM Revenues (Revenue Taxes) - Sch G	44201066	(0)
	DSM Revenues (Revenue Taxes) - Sch H	44204066	(0)
	DSM Revenues (Revenue Taxes) - Sch P	44206066	(0)
	Regulatory Liability (Revenue Taxes) - C&I	18670160	(0)
To record return in 2006 on 2000 C&I revenue taxes on program cost revenue overcollection.			
5	Regulatory Asset (2000 WH / SH Lost Margins) - REWH	17300000	(232)
	DSM Revenues (2000 WH / SH Lost Margins) - Sch R	44001066	(232)
To record return in 2006 on 2000 REWH lost margin overcollection.			
6	Regulatory Asset (2000 Lost Margins) - C&I	17300000	37
	DSM Revenues (2000 Lost Margins) - Sch G	44201066	23
	DSM Revenues (2000 Lost Margins) - Sch H	44204066	1
	DSM Revenues (2000 Lost Margins) - Sch P	44206066	13
To record return in 2006 on 2000 C&I lost margin cost revenue overcollection.			
7	DSM Revenues (Interest) - Sch R	44001066	(8)
	Regulatory Asset (Interest) - REWH	17300000	(8)
To record return in 2006 on 2000 REWH interest on program cost / lost margin overcollection.			

Hawaii Electric Light Company, Inc.
DSM Revenues - June 2006 Analysis

		<u>Debit</u>	<u>Credit</u>
8	DSM Revenues (Interest) - Sch G	44201066	(1)
	DSM Revenues (Interest) - Sch H	44204066	(0)
	DSM Revenues (Interest) - Sch P	44206066	(0)
	Regulatory Liability (Interest) - C&I	17300000	(1)
To record return in 2006 on 2000 C&I interest on program cost / lost margin overcollection.			
9	Regulatory Asset (SH Incentives) - REWH / SH	17300000	0
	DSM Revenues (SH Incentives) - REWH / SH	44001066	0
To record collection in 2006 of 2000 REWH / SH shareholder incentives.			
10	Regulatory Asset (SH Incentives) - C&I	17300000	(1)
	DSM Revenues (SH Incentives) - C&I - Sch G	44201066	(1)
	DSM Revenues (SH Incentives) - C&I - Sch H	44204066	(0)
	DSM Revenues (SH Incentives) - C&I - Sch P	44206066	(0)
To record collection in 2006 of 2000 C&I shareholder incentives.			

Hawaii Electric Light Company, Inc.
DSM Revenues - June 2006 Analysis

		Debit	Credit
HM073B			
1	Regulatory Liability (Program Costs) - REWH	18670160	2
	DSM Revenues (Program Costs) - Sch R	44001066	2
	To record return in 2006 on 2001 REWH program cost revenue overcollection.		
2	Regulatory Liability (Program Costs) - C&I	18670160	(1)
	DSM Revenues (Program Costs) - Sch G	44201066	(1)
	DSM Revenues (Program Costs) - Sch H	44204066	(0)
	DSM Revenues (Program Costs) - Sch P	44206066	(0)
	To record return in 2006 on 2001 C&I program cost revenue overcollection.		
3	Regulatory Liability (Revenue Taxes) - REWH	18670160	0
	DSM Revenues (Revenue Taxes) - Sch R	44001066	0
	To record return in 2006 on 2001 REWH revenue taxes on program cost revenue overcollection.		
4	Regulatory Liability (Revenue Taxes) - C&I	18670160	(0)
	DSM Revenues (Revenue Taxes) - Sch G	44201066	(0)
	DSM Revenues (Revenue Taxes) - Sch H	44204066	-
	DSM Revenues (Revenue Taxes) - Sch P	44206066	(0)
	To record return in 2006 on 2001 C&I revenue taxes on program cost revenue overcollection.		
5	Regulatory Asset (WH / SH Lost Margins) - REWH	17300000	(814)
	DSM Revenues (WH / SH Lost Margins) - Sch R	44001066	(814)
	To record return in 2006 on 2001 REWH lost margin overcollection.		
6	Regulatory Asset (Lost Margins) - C&I	17300000	158
	DSM Revenues (Lost Margins) - Sch G	44201066	98
	DSM Revenues (Lost Margins) - Sch H	44204066	4
	DSM Revenues (Lost Margins) - Sch P	44206066	56
	To record return in 2006 on 2001 C&I lost margin cost revenue overcollection.		
7	DSM Revenues (Interest) - Sch R	44001066	(60)
	Regulatory Asset (Interest) - REWH	17300000	(60)

Hawaii Electric Light Company, Inc.
DSM Revenues - June 2006 Analysis

		<u>Debit</u>	<u>Credit</u>
To record return in 2006 on 2001 REWH interest on program cost / lost margin overcollection.			
8	DSM Revenues (Interest) - Sch G	44201066	(7)
	DSM Revenues (Interest) - Sch H	44204066	(0)
	DSM Revenues (Interest) - Sch P	44206066	(4)
	Regulatory Liability (Interest) - C&I	17300000	(11)
To record return in 2006 on 2001 C&I interest on program cost / lost margin overcollection.			
9	Regulatory Asset (SH Incentives) - REWH / SH	17300000	(1,537)
	DSM Revenues (SH Incentives) - REWH / SH	44001066	(1,537)
To record collection in 2006 of 2001 REWH / SH shareholder incentives.			
10	Regulatory Asset (SH Incentives) - C&I	17300000	322
	DSM Revenues (SH Incentives) - C&I - Sch G	44201066	201
	DSM Revenues (SH Incentives) - C&I - Sch H	44204066	7
	DSM Revenues (SH Incentives) - C&I - Sch P	44206066	114
To record collection in 2006 of 2001 C&I shareholder incentives.			

Hawaii Electric Light Company, Inc.
~~DSM Revenues - June 2006 Analysis~~

		<u>Debit</u>	<u>Credit</u>
HM073C			
1	DSM Revenues (Program Costs) - Sch R	44001066	2
	Regulatory Asset (Program Costs) - REWH	18670160	2
To record return in 2006 on 2002 REWH program cost revenue overcollection.			
2	DSM Revenues (Program Costs) - Sch G	44201066	12
	DSM Revenues (Program Costs) - Sch H	44204066	0
	DSM Revenues (Program Costs) - Sch P	44206066	7
	Regulatory Asset (Program Costs) - C&I	18670160	20
To record return in 2006 on 2002 C&I program cost revenue overcollection.			
3	Regulatory Liability (Revenue Taxes) - REWH	18670160	(0)
	DSM Revenues (Revenue Taxes) - Sch R	44001066	(0)
To record return in 2006 on 2002 REWH revenue taxes on program cost revenue overcollection.			
4	Regulatory Liability (Revenue Taxes) - C&I	18670160	(2)
	DSM Revenues (Revenue Taxes) - Sch G	44201066	(1)
	DSM Revenues (Revenue Taxes) - Sch H	44204066	(0)
	DSM Revenues (Revenue Taxes) - Sch P	44206066	(1)
To record return in 2006 on 2002 C&I revenue taxes on program cost revenue overcollection.			
5	Regulatory Asset (2002 Lost Margins) - REWH	17300000	(1,193)
	DSM Revenues (2002 Lost Margins) - Sch R	44001066	(1,193)
To record in 2006 on 2002 lost margins REWH DSM impacts.			
6	Regulatory Asset (2002 Lost Margins) - C&I	17300000	111
	DSM Revenues (2002 Lost Margins) - Sch G	44201066	69
	DSM Revenues (2002 Lost Margins) - Sch H	44204066	3
	DSM Revenues (2002 Lost Margins) - Sch P	44206066	39
To record in 2006 on 2002 lost margins C&I DSM impacts.			

Hawaii Electric Light Company, Inc.
DSM Revenues - June 2006 Analysis

		<u>Debit</u>	<u>Credit</u>
7	DSM Revenues (Interest) - Sch R	44001066	
	Regulatory Asset (Interest) - REWH	(169)	
			(169)
	To record return in 2006 on 2002 REWH interest on program cost / lost margin overcollection.		
8	DSM Revenues (Interest) - Sch G	44201066	(18)
	DSM Revenues (Interest) - Sch H	44204066	(1)
	DSM Revenues (Interest) - Sch P	44206066	(10)
	Regulatory Liability (Interest) - C&I	17300000	(29)
	To record return in 2006 on 2002 C&I interest on program cost / lost margin overcollection.		
9	Regulatory Asset (SH Incentives) - REWH / SH	17300000	-
	DSM Revenues (SH Incentives) - REWH / SH	44001066	-
	To record collection in 2006 of 2002 REWH / SH shareholder incentives.		
10	Regulatory Asset (SH Incentives) - C&I	17300000	25
	DSM Revenues (SH Incentives) - C&I - Sch G	44201066	15
	DSM Revenues (SH Incentives) - C&I - Sch H	44204066	1
	DSM Revenues (SH Incentives) - C&I - Sch P	44206066	9
	To record collection in 2006 of 2002 C&I shareholder incentives.		

Hawaii Electric Light Company, Inc.
DSM Revenues - June 2006 Analysis

		Debit	Credit
HM073D			
1	DSM Program Costs - Sch R	44001066	(175)
	DSM Program Costs - Sch E	44002066	(1)
	Regulatory Asset (Program Costs) - REWH	18670160	(176)
To record return in 2006 on 2003 program cost collections (REWH).			
2	DSM Program Costs - C&I (Energy Efficiency)	44201066	182
	DSM Program Costs - C&I (New Construction)	44204066	7
	DSM Program Costs - C&I (Customized Rebate)	44206066	103
	Regulatory Asset (Program Costs) - C&I	18670160	292
To record return in 2006 on 2003 program cost collections (C&I).			
3	Regulatory Liability (Revenue Taxes) - REWH	18670160	17
	DSM Revenues (Revenue Taxes) - Sch R	44001066	17
	DSM Revenues (Revenue Taxes) - Sch E	44002066	0
To record return in 2006 of 2003 REWH revenue taxes on program cost revenue			
4	Regulatory Liability (Revenue Taxes) - C&I	18670160	28
	DSM Revenues (Revenue Taxes) - Sch G	44201066	18
	DSM Revenues (Revenue Taxes) - Sch H	44204066	1
	DSM Revenues (Revenue Taxes) - Sch P	44206066	10
To record return in 2006 of 2003 C&I revenue taxes on program cost revenue			
5	DSM Revenues (Lost Margins) - Sch R	44001066	1,331
	DSM Revenues (Lost Margins) - Sch E	44002066	9
	Regulatory Asset (Lost Margins) - REWH	17300000	1,339
To record 2006 collections on 2003 lost margins REWH DSM impacts.			
6	DSM Revenues (Lost Margins) - Sch G	44201066	80
	DSM Revenues (Lost Margins) - Sch H	44204066	3
	DSM Revenues (Lost Margins) - Sch P	44206066	46
	Regulatory Asset (Lost Margins) - C&I	17300000	129
To record 2006 collections on 2003 lost margins 2003 C&I DSM impacts.			

Hawaii Electric Light Company, Inc.
~~DSM Revenues - June 2006 Analysis~~

		<u>Debit</u>	<u>Credit</u>
7 DSM Revenues (Interest) - Sch R	44001066	(291)	
DSM Revenues (Interest) - Sch E	44002066	(2)	
Regulatory Asset (Interest) - REWH	17300000		(293)

To record return in 2006 on 2003 REWH interest on program cost / lost margin overcollection.

8 DSM Revenues (Interest) - Sch G	44201066	12	
DSM Revenues (Interest) - Sch H	44204066	0	
DSM Revenues (Interest) - Sch P	44206066	7	
Regulatory Liability (Interest) - C&I	17300000		19

To record return in 2006 on 2003 C&I interest on program cost / lost margin overcollection.

9 Regulatory Asset (SH Incentives) - REWH / SH	17300000	-	
DSM Revenues (SH Incentives) - Sch R	44001066		-
DSM Revenues (SH Incentives) - Sch E	44002066		-

To record collection in 2006 of 2003 REWH / SH shareholder incentives.

10 Regulatory Asset (SH Incentives) - C&I	17300000	(1,072)	
DSM Revenues (SH Incentives) - C&I - Sch G	44201066		(668)
DSM Revenues (SH Incentives) - C&I - Sch H	44204066		(25)
DSM Revenues (SH Incentives) - C&I - Sch P	44206066		(380)

To record collection in 2006 of 2003 C&I shareholder incentives.

Hawaii Electric Light Company, Inc.
DSM Revenues - June 2006 Analysis

		Debit	Credit
HM073E			
1	DSM Program Costs - Sch R	44001066	729
	DSM Program Costs - Sch E	44002066	5
	Regulatory Asset (Program Costs) - REWH	18670160	733
To record return in 2006 on 2004 program cost collections (REWH).			
2	DSM Program Costs - C&I (Energy Efficiency)	44201066	155
	DSM Program Costs - C&I (New Construction)	44204066	6
	DSM Program Costs - C&I (Customized Rebate)	44206066	89
	Regulatory Asset (Program Costs) - C&I	18670160	250
To record return in 2006 on 2004 program cost collections (C&I).			
3	Regulatory Liability (Revenue Taxes) - REWH	18670160	(72)
	DSM Revenues (Revenue Taxes) - Sch R	44001066	(71)
	DSM Revenues (Revenue Taxes) - Sch E	44002066	(0)
To record return in 2006 of 2004 REWH revenue taxes on program cost revenue			
4	Regulatory Liability (Revenue Taxes) - C&I	18670160	24
	DSM Revenues (Revenue Taxes) - Sch G	44201066	15
	DSM Revenues (Revenue Taxes) - Sch H	44204066	1
	DSM Revenues (Revenue Taxes) - Sch P	44206066	9
To record return in 2006 of 2004 C&I revenue taxes on program cost revenue			
5	DSM Revenues (Lost Margins) - Sch R	44001066	444
	DSM Revenues (Lost Margins) - Sch E	44002066	3
	Regulatory Asset (Lost Margins) - REWH	17300000	447
To record 2006 collections on 2004 lost margins 2004 REWH DSM impacts.			
6	DSM Revenues (Lost Margins) - Sch G	44201066	2,897
	DSM Revenues (Lost Margins) - Sch H	44204066	107
	DSM Revenues (Lost Margins) - Sch P	44206066	1,648
	Regulatory Asset (Lost Margins) - C&I	17300000	4,652
To record 2006 collections on 2004 lost margins 2004 C&I DSM impacts.			

Hawaii Electric Light Company, Inc.
~~DSM Revenues - June 2006 Analysis~~

		<u>Debit</u>	<u>Credit</u>
7	DSM Revenues (Interest) - Sch R	44001066	(903)
	DSM Revenues (Interest) - Sch E	44002066	(6)
	Regulatory Asset (Interest) - REWH	17300000	(909)

To record return in 2006 on 2004 REWH interest on program cost / lost margin overcollection.

8	DSM Revenues (Interest) - Sch G	44201066	(690)	
	DSM Revenues (Interest) - Sch H	44204066	(25)	
	DSM Revenues (Interest) - Sch P	44206066	(392)	
	Regulatory Liability (Interest) - C&I	17300000		(1,108)

To record return in 2006 on 2004 C&I interest on program cost / lost margin overcollection.

9	Regulatory Asset (SH Incentives) - REWH / SH	17300000	-	
	DSM Revenues (SH Incentives) - Sch R	44001066		-
	DSM Revenues (SH Incentives) - Sch E	44002066		-

To record collection in 2006 of 2004 REWH / SH shareholder incentives.

10	Regulatory Asset (SH Incentives) - C&I	17300000	(1,123)	
	DSM Revenues (SH Incentives) - C&I - Sch G	44201066		(699)
	DSM Revenues (SH Incentives) - C&I - Sch H	44204066		(26)
	DSM Revenues (SH Incentives) - C&I - Sch P	44206066		(398)

To record collection in 2006 of 2004 C&I shareholder incentives.

Hawaii Electric Light Company, Inc.
DSM Revenues - June 2006 Analysis

		Debit	Credit
HM073F			
1	DSM Program Costs - Sch R	44001066	(8,230)
	DSM Program Costs - Sch E	44002066	(53)
	Regulatory Asset (Program Costs) - REWH	18670160	(8,283)
To record return in 2006 on 2005 program cost collections (REWH).			
2	DSM Program Costs - C&I (Energy Efficiency)	44201066	8,063
	DSM Program Costs - C&I (New Construction)	44204066	298
	DSM Program Costs - C&I (Customized Rebate)	44206066	4,607
	Regulatory Asset (Program Costs) - C&I	18670160	12,968
To record return in 2006 on 2005 program cost collections (C&I).			
3	Regulatory Liability (Revenue Taxes) - REWH	18670160	808
	DSM Revenues (Revenue Taxes) - Sch R	44001066	802
	DSM Revenues (Revenue Taxes) - Sch E	44002066	5
To record return in 2006 of 2005 REWH revenue taxes on program cost revenue			
4	Regulatory Liability (Revenue Taxes) - C&I	18670160	1,268
	DSM Revenues (Revenue Taxes) - Sch G	44201066	790
	DSM Revenues (Revenue Taxes) - Sch H	44204066	29
	DSM Revenues (Revenue Taxes) - Sch P	44206066	449
To record return in 2006 of 2005 C&I revenue taxes on program cost revenue			
5	DSM Revenues (Lost Margins) - Sch R	44001066	(3,068)
	DSM Revenues (Lost Margins) - Sch E	44002066	(20)
	Regulatory Asset (Lost Margins) - REWH	17300000	(3,087)
To record 2006 collections on 2005 lost margins 2004 REWH DSM impacts.			
6	DSM Revenues (Lost Margins) - Sch G	44201066	9,419
	DSM Revenues (Lost Margins) - Sch H	44204066	346
	DSM Revenues (Lost Margins) - Sch P	44206066	5,356
	Regulatory Asset (Lost Margins) - C&I	17300000	15,122
To record 2006 collections on 2005 lost margins 2004 C&I DSM impacts.			

Hawaii Electric Light Company, Inc.
DSM Revenues - June 2006 Analysis

		<u>Debit</u>	<u>Credit</u>
7 DSM Revenues (Interest) - Sch R	44001066	3,433	
DSM Revenues (Interest) - Sch E	44002066	22	
Regulatory Asset (Interest) - REWH	17300000		3,455

To record return in 2006 on 2005 REWH interest on program cost / lost margin overcollection.

8 DSM Revenues (Interest) - Sch G	44201066	3,558	
DSM Revenues (Interest) - Sch H	44204066	131	
DSM Revenues (Interest) - Sch P	44206066	2,023	
Regulatory Liability (Interest) - C&I	17300000		5,713

To record return in 2006 on 2005 C&I interest on program cost / lost margin overcollection.

9 Regulatory Asset (SH Incentives) - REWH / SH	17300000	-	
DSM Revenues (SH Incentives) - Sch R	44001066		-
DSM Revenues (SH Incentives) - Sch E	44002066		-

To record collection in 2006 of 2005 REWH / SH shareholder incentives.

10 Regulatory Asset (SH Incentives) - C&I	17300000	(15,692)	
DSM Revenues (SH Incentives) - C&I - Sch G	44201066		(9,775)
DSM Revenues (SH Incentives) - C&I - Sch H	44204066		(359)
DSM Revenues (SH Incentives) - C&I - Sch P	44206066		(5,558)

To record collection in 2006 of 2005 C&I shareholder incentives.

Hawaii Electric Light Company, Inc.
DSM Revenues June 2006 Analysis

		Debit	Credit
HM073X			
1	Regulatory Asset (Program Costs) - REWH	18670160	55,701
	DSM Program Costs - REWH	C0011238	55,701
	To defer recognition of 2006 current month's incremental program costs (REWH).		
2	Regulatory Asset (Program Costs) - C&I	18670160	21,261
	DSM Program Costs - C&I (Energy Efficiency)	C0011239	7,824
	DSM Program Costs - C&I (New Construction)		8,037
	DSM Program Costs - C&I (Customized Rebate)		5,400
	To defer recognition of 2006 current month's incremental program costs (C&I).		
3	DSM Program Costs - REWH	C0011238	58,800
	Regulatory Asset (Program Costs) - REWH	18670160	58,800
	To amortize 2006 deferred program costs based on current month's collections (REWH).		
4	DSM Program Costs - C&I (Energy Efficiency)	C0011239	50,488
	DSM Program Costs - C&I (New Construction)		
	DSM Program Costs - C&I (Customized Rebate)		
	Regulatory Asset (Program Costs) - C&I	18670160	50,488
	To amortize 2006 deferred program costs based on current month's collections (C&I).		
5	Regulatory Liability (Revenue Taxes) - REWH	18670160	(5,733)
	DSM Revenues (Revenue Taxes) - Sch R	44001066	(5,696)
	DSM Revenues (Revenue Taxes) - Sch E	44002066	(37)
	To record 2006 REWH revenue taxes on program cost revenue		
6	Regulatory Liability (Revenue Taxes) - C&I	18670160	(4,923)
	DSM Revenues (Revenue Taxes) - Sch G	44201066	(3,066)
	DSM Revenues (Revenue Taxes) - Sch H	44204066	(113)
	DSM Revenues (Revenue Taxes) - Sch P	44206066	(1,744)
	To record 2006 C&I revenue taxes on program cost revenue		

Hawaii Electric Light Company, Inc.
DSM Revenues - June 2006 Analysis

		<u>Debit</u>	<u>Credit</u>
7	Regulatory Asset (WH / SH Lost Margins) - REWH	17300000	
	DSM Revenues (WH / SH Lost Margins) - Sch R	44001066	
		5,299	5,299
	To accrue lost margins expected based on 2006 REWH DSM impacts.		
8	Regulatory Asset (2003 Lost Margins) - C&I	17300000	
	DSM Revenues (2003 Lost Margins) - Sch G	44201066	
	DSM Revenues (2003 Lost Margins) - Sch H	44204066	
	DSM Revenues (2003 Lost Margins) - Sch P	44206066	
		11,849	9,259
			69
			2,521
	To accrue lost margins expected based on 2006 C&I DSM impacts.		
9	DSM Revenues (Lost Margins) - Sch R	44001066	
	DSM Revenues (Lost Margins) - Sch E	44002066	
	Regulatory Asset (Lost Margins) - REWH	17300000	
		34,372	
		222	
			34,594
	To record current month collections on 2006 lost margins REWH DSM impacts.		
10	DSM Revenues (Lost Margins) - Sch G	44201066	
	DSM Revenues (Lost Margins) - Sch H	44204066	
	DSM Revenues (Lost Margins) - Sch P	44206066	
	Regulatory Asset (Lost Margins) - C&I	17300000	
		53,931	
		1,983	
		30,667	
			86,582
	To record current month collections on 2006 lost margins C&I DSM impacts.		
11	Regulatory Asset (SH Incentives) - REWH / SH	17300000	
	DSM Revenues (SH Incentives) - REWH / SH	44001066	
		-	-
	To accrue shareholder incentives expected based on 2006 REWH DSM impacts.		
12	Regulatory Asset (SH Incentives) - C&I	17300000	
	DSM Revenues (SH Incentives) - C&I - Sch G	44201066	
	DSM Revenues (SH Incentives) - C&I - Sch H	44204066	
	DSM Revenues (SH Incentives) - C&I - Sch P	44206066	
		30,935	11,508
			11
			19,416
	To accrue shareholder incentives expected based on 2006 C&I DSM impacts.		
13	Regulatory Asset (WH / SH Lost Margins) - REWH	17300000	
	DSM Revenues (WH / SH Lost Margins) - Sch R	44001066	
		32,600	32,600
	To record lost margins in 2006 REWH for 00-05 installations		

Hawaii Electric Light Company, Inc.
~~DSM Revenues - June 2006 Analysis~~

		<u>Debit</u>	<u>Credit</u>
14 Regulatory Asset (Lost Margins) - C&I	17300000	88,100	
DSM Revenues (Lost Margins) - Sch G	44201066		59,100
DSM Revenues (Lost Margins) - Sch H	44204066		2,600
DSM Revenues (Lost Margins) - Sch P	44206066		26,400

To record lost margins 2006 C&I for 00-05 installations

Amortize Loss Margin in 2002 for the following:

	1999	2000	2001	2002	Total	Amort		
G	3,176	12,775	7,401	26,906	50,258	297,737	27,950	67.03%
H	196	786	456	420	1,858	11,007	1,030	2.47%
P	1,977	7,950	4,606	8,341	22,874	135,509	12,720	30.50%
	5,349	21,511	12,463	35,667				100.00%
					74,990	444,253	41,700	

Lost Margin in 2003 for 99-02 installed

R	65,388	5,449
E	351	29
G	14,543	1,212
J	44,491	3,708
H/K	624	52
P	20,097	1,675

	REWH	Commercial	Total
1999 Installations	2,987	3,341	6,328
2000 Installations	97,453	225,627	323,080
2001 Installations	101,060	186,958	288,018
Subtotal Per 3/28/02 filing with PUC	201,500	415,926	617,426
2002 Installations - Per 12/02 Es Seese Report	60,571	84,923	145,494
Total For 2003 Accrual	262,071	500,849	762,920
Monthly 2003 Accrual	21,839	41,737	63,577
SAY	21,800	41,700	63,500

UPDATED 3/03			
	REWH	Commercial	Total
1999 Installations	2,985	3,339	6,324
2000 Installations	97,962	225,469	323,431
2001 Installations	116,490	190,582	307,072
2002 Installations	74,787	182,578	257,365
Total For 2003 Accrual	292,224	601,968	894,192
Monthly 2003 Accrual	24,352	50,164	74,516
SAY	24,400	50,200	74,600
		33600	66.93%
		1200	2.39%
		15400	30.68%
		50200	100.00%

UPDATED 1/04			
	REWH	Commercial	Total
1999 Installations	2,985	3,339	6,324
2000 Installations	97,962	225,469	323,431
2001 Installations	116,490	190,582	307,072
2002 Installations	74,787	182,578	257,365
2003 Installations	63,706	70,929	134,635
Total For 2004 Accrual	355,930	672,897	1,028,827
Monthly 2004 Accrual	29,661	56,075	85,736
SAY	30,000	56,000	86,000
		37500	66.96%
		1500	2.68%
		17000	30.36%
		56000	100.00%

UPDATED 3/04			
	REWH	Commercial	Total
1999 Installations	2,985	3,339	6,324
2000 Installations	97,962	225,469	323,431
2001 Installations	117,055	190,582	307,637
2002 Installations	93,172	189,816	282,988
2003 Installations	40,031	62,274	102,305
Total For 2004 Accrual	<u>351,205</u>	<u>671,480</u>	<u>1,022,685</u>
Monthly 2004 Accrual	29,267	55,957	85,224
SAY	<u>30,000</u>	<u>56,000</u>	<u>86,000</u>
		37500	66.96%
		1500	2.68%
		<u>17000</u>	<u>30.36%</u>
		<u>56000</u>	<u>100.00%</u>

UPDATED 1/05			
	REWH	Commercial	Total
1999 Installations	2,985	3,339	6,324
2000 Installations	97,962	225,469	323,431
2001 Installations	117,055	190,582	307,637
2002 Installations	93,172	189,816	282,988
2003 Installations	40,031	62,274	102,305
2004 Installations	50,000	47,000	97,000
Total For 2005 Accrual	<u>401,205</u>	<u>718,480</u>	<u>1,119,685</u>
Monthly 2005 Accrual	33,434	59,873	93,307
SAY	<u>33,000</u>	<u>60,000</u>	<u>93,000</u>
		40200	67.00%
		1600	2.67%
		<u>18200</u>	<u>30.33%</u>
		<u>60000</u>	<u>100.00%</u>

UPDATED 6/05			
	REWH	Commercial	Total
1999 Installations	2,982	3,335	6,317
2000 Installations	66,458	210,064	276,522
2001 Installations	81,391	181,725	263,116
2002 Installations	76,080	215,643	291,723
2003 Installations	68,587	201,214	269,801
2004 Installations	31,141	55,866	87,007
Total For 2005 Accrual	<u>326,639</u>	<u>867,847</u>	<u>1,194,486</u>
Monthly 2005 Accrual	27,220	72,321	99,541
SAY	<u>27,200</u>	<u>72,300</u>	<u>99,500</u>
		48500	67.08%
		1900	2.63%
		<u>21900</u>	<u>30.29%</u>
		<u>72300</u>	<u>100.00%</u>

UPDATED 5/06			
	REWH	Commercial	Total
1999 Installations	2,977	3,328	6,305
2000 Installations	66,344	209,634	275,978
2001 Installations	81,251	181,382	262,633
2002 Installations	76,102	215,207	291,309
2003 Installations	68,469	200,807	269,276
2004 Installations	61,742	187,650	249,392
2005 Installations	34,455	58,667	93,122
Total For 2006 Accrual	<u>391,340</u>	<u>1,056,675</u>	<u>1,448,015</u>
Monthly 2006 Accrual	32,612	88,056	120,668
SAY	<u>32,600</u>	<u>88,100</u>	<u>120,700</u>
	G	59,100	67.08%
	H	2,600	2.95%
	P	<u>26,400</u>	<u>29.97%</u>
		<u>88,100</u>	<u>100.00%</u>

May 2006 True-up:		
4/06 ytd	5/06 ytd sb	5/06 je
R 108,800.00	163,000.00	54,200.00
G 194,000.00	295,500.00	101,500.00
H 7,600.00	13,000.00	5,400.00
P 87,600.00	132,000.00	44,400.00

HAWAII ELECTRIC LIGHT COMPANY, INC.
\$ Revenue Recovery by Rate Sch, DSM Program
Schedule R
June 2006

	<u>Res</u>	<u>Total</u>
Program Cost, 2000	0.44	0.44
Revenue Tax on 2000 Program Costs	0.05	0.05
Lost Margin, 2000	230.84	230.84
Interest Accrual for (Overcollection)/Undercollection, 2000	7.02	7.02
Revenue Tax on 2000 Interest	0.68	0.68
Shareholder Incentives, 2000	(0.21)	(0.21)
Revenue Tax on 2000 Shareholder Incentives	(0.02)	(0.02)
Program Cost, 2001	(1.55)	(1.55)
Revenue Tax on 2001 Program Costs	(0.15)	(0.15)
Lost Margin, 2001	808.30	808.30
Interest Accrual for (Overcollection)/Undercollection, 2001	53.98	53.98
Revenue Tax on 2001 Interest	5.25	5.25
Shareholder Incentives, 2001	1,391.86	1,391.86
Revenue Tax on 2001 Shareholder Incentives	135.71	135.71
Program Cost, 2002	1.87	1.87
Revenue Tax on 2002 Program Costs	0.18	0.18
Lost Margin, 2002	1,185.38	1,185.38
Interest Accrual for (Overcollection/Undercollection), 2002	153.43	153.43
Revenue Tax on 2002 Interest	14.96	14.96
Shareholder Incentives, 2002	-	-
Revenue Tax on 2002 Shareholder Incentives	-	-
Program Cost, 2003	(174.62)	(174.62)
Revenue Tax on 2003 Program Costs	(17.02)	(17.02)
Lost Margin, 2003	1,330.51	1,330.51
Interest Accrual for (Overcollection/Undercollection), 2003	(265.34)	(265.34)
Revenue Tax on 2003 - 04 Interest	(25.90)	(25.90)
Shareholder Incentives, 2003	-	-
Revenue Tax on 2003 Shareholder Incentives	-	-
Program Cost, 2004	728.72	728.72
Revenue Tax on 2004 Program Costs	71.05	71.05
Lost Margin, 2004	444.04	444.04
Interest Accrual for (Overcollection/Undercollection), 2004	(823.10)	(823.10)
Revenue Tax on 2004 - 05 Interest	(80.21)	(80.21)
Shareholder Incentives, 2004	-	-
Revenue Tax on 2004 Shareholder Incentives	-	-
Recorded Residential Program Cost, 2005	(8,229.94)	(8,229.94)
Revenue Tax on 2005 Program Costs	(802.41)	(802.41)
Recorded Residential Lost Margin, 2005	(3,067.62)	(3,067.62)
Interest Accrual for (Overcollection)/Undercollection, 2005	3,128.14	3,128.14
Revenue Tax on 2005-06 Interest	305.01	305.01
Recorded Residential Program Shareholder Incentives, 2005	-	-
Revenue Tax on 2005 Shareholder Incentives	-	-
Program Cost, 2006	58,422.43	58,422.43
Revenue Tax on 2006 Program Costs	5,696.18	5,696.18
Lost Margin, 2006	34,372.08	34,372.08
Total	95,000.05	95,000.05

	Residential Eff. 6/1/05	C&I Eff. 6/1/05
Program Cost, 2000	-0.0042%	-0.0027%
Revenue Tax on 2000 Program Costs	-0.0004%	-0.0003%
Lost Margin, 2000	-2.1933%	-0.1866%
Interest Accrual for (Overcollection)/Undercollection, 2000	-0.0667%	-0.0044%
Revenue Tax on 2000 Interest	-0.0065%	-0.0004%
Shareholder Incentives, 2000	0.0020%	0.0043%
Revenue Tax on 2000 Shareholder Incentives	0.0002%	0.0004%
Program Cost, 2001	0.0147%	0.0048%
Revenue Tax on 2001 Program Costs	0.0014%	0.0005%
Lost Margin, 2001	-7.6799%	-0.7929%
Interest Accrual for (Overcollection)/Undercollection, 2001	-0.5129%	-0.0511%
Revenue Tax on 2001 Interest	-0.0499%	-0.0050%
Shareholder Incentives, 2001	-13.2246%	-1.4754%
Revenue Tax on 2001 Shareholder Incentives	-1.2894%	-0.1439%
Program Cost, 2002	-0.0178%	0.0987%
Revenue Tax on 2002 Program Costs	-0.0017%	0.0096%
Lost Margin, 2002	-11.2521%	-0.5596%
Interest Accrual for (Overcollection/Undercollection), 2002	-1.4578%	-0.1341%
Revenue Tax on 2002 Interest	-0.1421%	-0.0131%
Shareholder Incentives, 2002	0.0000%	-0.1126%
Revenue Tax on 2002 Shareholder Incentives	0.0000%	-0.0110%
Program Cost, 2003	1.6591%	-1.4677%
Revenue Tax on 2003 Program Costs	0.1618%	-0.1431%
Lost Margin, 2003	-12.5249%	0.6495%
Interest Accrual for (Overcollection/Undercollection), 2003	2.6486%	0.0853%
Revenue Tax on 2003 - 04 Interest	0.2583%	0.0083%
Shareholder Incentives, 2003	0.0000%	4.4162%
Revenue Tax on 2003 Shareholder Incentives	0.0000%	0.9735%
Program Cost, 2004	-6.9239%	-1.2592%
Revenue Tax on 2004 Program Costs	-0.6750%	-0.1228%
Lost Margin, 2004	-2.5837%	16.7169%
Interest Accrual for (Overcollection/Undercollection), Jan. 2004 - May 2005	3.6951%	2.0862%
Revenue Tax on 2004 - 05 Interest	0.3603%	0.2034%
Shareholder Incentives, 2004	0.0000%	5.1443%
Revenue Tax on 2004 Shareholder Incentives	0.0000%	0.5016%
Program Cost, 2005	89.0842%	29.2090%
Revenue Tax on 2005 Program Costs	8.6857%	2.8479%
Lost Margin, 2005	54.0354%	43.5254%
Total	100.0000%	100.0000%

Hawaii Electric Light Company, Inc.
 Percent Breakdown of Residential and C&I DSM Surcharges
 (Effective April 1, 2006 - March 31, 2007)

	DSM % Breakdown	
	Residential	C&I
	Eff. 4/1/06	Eff. 4/1/06
Program Cost, 2000	0.0005%	-0.0003%
Revenue Tax on 2000 Program Costs	0.0001%	0.0000%
Lost Margin, 2000	0.2430%	-0.0220%
Interest Accrual for (Overcollection)/Undercollection, 2000	0.0074%	-0.0005%
Revenue Tax on 2000 Interest	0.0007%	-0.0001%
Shareholder Incentives, 2000	-0.0002%	0.0005%
Revenue Tax on 2000 Shareholder Incentives	0.0000%	0.0001%
Program Cost, 2001	-0.0016%	0.0006%
Revenue Tax on 2001 Program Costs	-0.0002%	0.0001%
Lost Margin, 2001	0.8508%	-0.0934%
Interest Accrual for (Overcollection)/Undercollection, 2001	0.0568%	-0.0060%
Revenue Tax on 2001 Interest	0.0055%	-0.0006%
Shareholder Incentives, 2001	1.4651%	-0.1738%
Revenue Tax on 2001 Shareholder Incentives	0.1429%	-0.0169%
Program Cost, 2002	0.0020%	0.0116%
Revenue Tax on 2002 Program Costs	0.0002%	0.0011%
Lost Margin, 2002	1.2478%	-0.0659%
Interest Accrual for (Overcollection)/Undercollection, 2002	0.1615%	-0.0158%
Revenue Tax on 2002 Interest	0.0158%	-0.0015%
Shareholder Incentives, 2002	0.0000%	-0.0133%
Revenue Tax on 2002 Shareholder Incentives	0.0000%	-0.0013%
Program Cost, 2003	-0.1838%	-0.1728%
Revenue Tax on 2003 Program Costs	-0.0179%	-0.0169%
Lost Margin, 2003	1.4005%	0.0765%
Interest Accrual for (Overcollection)/Undercollection, 2003	-0.2793%	0.0101%
Revenue Tax on 2003 - 04 Interest	-0.0273%	0.0010%
Shareholder Incentives, 2003	0.0000%	0.5201%
Revenue Tax on 2003 Shareholder Incentives	0.0000%	0.1146%
Program Cost, 2004	0.7671%	-0.1483%
Revenue Tax on 2004 Program Costs	0.0748%	-0.0145%
Lost Margin, 2004	0.4674%	2.7546%
Interest Accrual for (Overcollection)/Undercollection, Jan. 2004 - May 2005	-0.8664%	-0.5978%
Revenue Tax on 2004 - 05 Interest	-0.0844%	-0.0583%
Shareholder Incentives, 2004	0.0000%	0.6058%
Revenue Tax on 2004 Shareholder Incentives	0.0000%	0.0591%
Recorded Residential Program Cost, 2005	-8.6631%	-7.7023%
Revenue Tax on 2005 Program Costs	-0.8446%	-0.7510%
Recorded Residential Lost Margin, 2005	-3.2291%	8.9551%
Interest Accrual for (Overcollection)/Undercollection, Jan. 2005 - March 2006	3.2928%	3.0824%
Revenue Tax on 2005-06 Interest	0.3211%	0.3005%
Recorded Residential Program Shareholder Incentives, 2005	0.0000%	8.4673%
Revenue Tax on 2005 Shareholder Incentives	0.0000%	0.8256%
Program Cost, 2006	61.4973%	29.8987%
Revenue Tax on 2006 Program Costs	5.9960%	2.9151%
Lost Margin, 2006	36.1811%	51.2729%
Total	100.0000%	100.0000%

HAWAII ELECTRIC LIGHT COMPANY, INC.
Recorded DSM Surcharge (\$)
June 2006

	<u>Billed</u> <u>Revenue</u>	<u>Previous</u> <u>Unbilled</u> <u>Revenue</u>	<u>Current</u> <u>Unbilled</u> <u>Revenue</u>	<u>Recorded</u> <u>Revenue</u>
R	96,023.14	48,427.29	47,404.21	95,000.06
E	621.49	227.74	219.55	613.30
G	25,499.64	9,693.60	9,913.10	25,719.14
J	78,391.62	27,132.16	27,700.33	78,959.79
U	405.81	213.20	312.70	505.31
H	1,766.88	644.79	646.97	1,769.06
K	2,103.61	595.32	591.03	2,099.32
P	58,709.98	27,011.83	28,114.13	59,812.28
F		-		-
Total	263,522.17	113,945.93	114,902.02	264,478.26

HAWAII ELECTRIC LIGHT COMPANY, INC.
\$ Revenue Recovery by Rate Sch, DSM Program
Schedule R
June 2006

	<u>Res</u>	<u>Total</u>
Program Cost, 2000	0.44	0.44
Revenue Tax on 2000 Program Costs	0.05	0.05
Lost Margin, 2000	230.84	230.84
Interest Accrual for (Overcollection)/Undercollection, 2000	7.02	7.02
Revenue Tax on 2000 Interest	0.68	0.68
Shareholder Incentives, 2000	(0.21)	(0.21)
Revenue Tax on 2000 Shareholder Incentives	(0.02)	(0.02)
Program Cost, 2001	(1.55)	(1.55)
Revenue Tax on 2001 Program Costs	(0.15)	(0.15)
Lost Margin, 2001	808.30	808.30
Interest Accrual for (Overcollection)/Undercollection, 2001	53.98	53.98
Revenue Tax on 2001 Interest	5.25	5.25
Shareholder Incentives, 2001	1,391.86	1,391.86
Revenue Tax on 2001 Shareholder Incentives	135.71	135.71
Program Cost, 2002	1.87	1.87
Revenue Tax on 2002 Program Costs	0.18	0.18
Lost Margin, 2002	1,185.38	1,185.38
Interest Accrual for (Overcollection/Undercollection), 2002	153.43	153.43
Revenue Tax on 2002 Interest	14.96	14.96
Shareholder Incentives, 2002	-	-
Revenue Tax on 2002 Shareholder Incentives	-	-
Program Cost, 2003	(174.62)	(174.62)
Revenue Tax on 2003 Program Costs	(17.02)	(17.02)
Lost Margin, 2003	1,330.51	1,330.51
Interest Accrual for (Overcollection/Undercollection), 2003	(265.34)	(265.34)
Revenue Tax on 2003 - 04 Interest	(25.90)	(25.90)
Shareholder Incentives, 2003	-	-
Revenue Tax on 2003 Shareholder Incentives	-	-
Program Cost, 2004	728.72	728.72
Revenue Tax on 2004 Program Costs	71.05	71.05
Lost Margin, 2004	444.04	444.04
Interest Accrual for (Overcollection/Undercollection), 2004	(823.10)	(823.10)
Revenue Tax on 2004 - 05 Interest	(80.21)	(80.21)
Shareholder Incentives, 2004	-	-
Revenue Tax on 2004 Shareholder Incentives	-	-
Recorded Residential Program Cost, 2005	(8,229.94)	(8,229.94)
Revenue Tax on 2005 Program Costs	(802.41)	(802.41)
Recorded Residential Lost Margin, 2005	(3,067.62)	(3,067.62)
Interest Accrual for (Overcollection)/Undercollection, 2005	3,128.14	3,128.14
Revenue Tax on 2005-06 Interest	305.01	305.01
Recorded Residential Program Shareholder Incentives, 2005	-	-
Revenue Tax on 2005 Shareholder Incentives	-	-
Program Cost, 2006	58,422.43	58,422.43
Revenue Tax on 2006 Program Costs	5,696.18	5,696.18
Lost Margin, 2006	34,372.08	34,372.08
Total	95,000.05	95,000.05

HAWAII ELECTRIC LIGHT COMPANY, INC.
\$ Revenue Recovery by Rate Sch, DSM Program
Schedule E
June 2006

	<u>Res</u>	<u>Total</u>
Program Cost, 2000	0.00	0.00
Revenue Tax on 2000 Program Costs	0.00	0.00
Lost Margin, 2000	1.49	1.49
Interest Accrual for (Overcollection)/Undercollection,	0.05	0.05
Revenue Tax on 2000 Interest	0.00	0.00
Shareholder Incentives, 2000	(0.00)	(0.00)
Revenue Tax on 2000 Shareholder Incentives	(0.00)	(0.00)
Program Cost, 2001	(0.01)	(0.01)
Revenue Tax on 2001 Program Costs	(0.00)	(0.00)
Lost Margin, 2001	5.22	5.22
Interest Accrual for (Overcollection)/Undercollection,	0.35	0.35
Revenue Tax on 2001 Interest	0.03	0.03
Shareholder Incentives, 2001	8.99	8.99
Revenue Tax on 2001 Shareholder Incentives	0.88	0.88
Program Cost, 2002	0.01	0.01
Revenue Tax on 2002 Program Costs	0.00	0.00
Lost Margin, 2002	7.65	7.65
Interest Accrual for (Overcollection/Undercollection),	0.99	0.99
Revenue Tax on 2002 Interest	0.10	0.10
Shareholder Incentives, 2002	-	-
Revenue Tax on 2002 Shareholder Incentives	-	-
Program Cost, 2003	(1.13)	(1.13)
Revenue Tax on 2003 Program Costs	(0.11)	(0.11)
Lost Margin, 2003	8.59	8.59
Interest Accrual for (Overcollection/Undercollection),	(1.71)	(1.71)
Revenue Tax on 2003 - 04 Interest	(0.17)	(0.17)
Shareholder Incentives, 2003	-	-
Revenue Tax on 2003 Shareholder Incentives	-	-
Program Cost, 2004	4.70	4.70
Revenue Tax on 2004 Program Costs	0.46	0.46
Lost Margin, 2004	2.87	2.87
Interest Accrual for (Overcollection/Undercollection),	(5.31)	(5.31)
Revenue Tax on 2004 - 05 Interest	(0.52)	(0.52)
Shareholder Incentives, 2004	-	-
Revenue Tax on 2004 Shareholder Incentives	-	-
Recorded Residential Program Cost, 2005	(53.13)	(53.13)
Revenue Tax on 2005 Program Costs	(5.18)	(5.18)
Recorded Residential Lost Margin, 2005	(19.80)	(19.80)
Interest Accrual for (Overcollection)/Undercollection,	20.19	20.19
Revenue Tax on 2005-06 Interest	1.97	1.97
Recorded Residential Program Shareholder Incentives	-	-
Revenue Tax on 2005 Shareholder Incentives	-	-
Program Cost, 2006	377.16	377.16
Revenue Tax on 2006 Program Costs	36.77	36.77
Lost Margin, 2006	221.90	221.90
Total	613.30	613.30

HAWAII ELECTRIC LIGHT COMPANY, INC.
\$ Revenue Recovery by Rate Sch, DSM Program
Schedule G
June 2006

	<u>Comm</u>	<u>Total</u>
Program Cost, 2000	(0.08)	(0.08)
Revenue Tax on 2000 Program Costs	(0.01)	(0.01)
Lost Margin, 2000	(5.65)	(5.65)
Interest Accrual for (Overcollection)/Undercollection, 2000	(0.13)	(0.13)
Revenue Tax on 2000 Interest	(0.01)	(0.01)
Shareholder Incentives, 2000	0.13	0.13
Revenue Tax on 2000 Shareholder Incentives	0.01	0.01
Program Cost, 2001	0.15	0.15
Revenue Tax on 2001 Program Costs	0.02	0.02
Lost Margin, 2001	(24.02)	(24.02)
Interest Accrual for (Overcollection)/Undercollection, 2001	(1.55)	(1.55)
Revenue Tax on 2001 Interest	(0.15)	(0.15)
Shareholder Incentives, 2001	(44.69)	(44.69)
Revenue Tax on 2001 Shareholder Incentives	(4.36)	(4.36)
Program Cost, 2002	2.99	2.99
Revenue Tax on 2002 Program Costs	0.29	0.29
Lost Margin, 2002	(16.95)	(16.95)
Interest Accrual for (Overcollection)/Undercollection, 2002	(4.06)	(4.06)
Revenue Tax on 2002 Interest	(0.40)	(0.40)
Shareholder Incentives, 2002	(3.41)	(3.41)
Revenue Tax on 2002 Shareholder Incentives	(0.33)	(0.33)
Program Cost, 2003	(44.45)	(44.45)
Revenue Tax on 2003 Program Costs	(4.33)	(4.33)
Lost Margin, 2003	19.67	19.67
Interest Accrual for (Overcollection)/Undercollection, 2003	2.58	2.58
Revenue Tax on 2003 - 04 Interest	0.25	0.25
Shareholder Incentives, 2003	133.76	133.76
Revenue Tax on 2003 Shareholder Incentives	29.48	29.48
Program Cost, 2004	(38.14)	(38.14)
Revenue Tax on 2004 Program Costs	(3.72)	(3.72)
Lost Margin, 2004	708.46	708.46
Interest Accrual for (Overcollection)/Undercollection, Jan. 2004 -	(153.75)	(153.75)
Revenue Tax on 2004 - 05 Interest	(14.99)	(14.99)
Shareholder Incentives, 2004	155.81	155.81
Revenue Tax on 2004 Shareholder Incentives	15.19	15.19
Recorded Residential Program Cost, 2005	(1,980.96)	(1,980.96)
Revenue Tax on 2005 Program Costs	(193.15)	(193.15)
Recorded Residential Lost Margin, 2005	2,303.17	2,303.17
Interest Accrual for (Overcollection)/Undercollection, Jan. 2005 -	792.76	792.76
Revenue Tax on 2005-06 Interest	77.29	77.29
Recorded Residential Program Shareholder Incentives, 2005	2,177.71	2,177.71
Revenue Tax on 2005 Shareholder Incentives	212.33	212.33
Program Cost, 2006	7,689.68	7,689.68
Revenue Tax on 2006 Program Costs	749.74	749.74
Lost Margin, 2006	13,186.94	13,186.94
Total	25,719.14	25,719.14

HAWAII ELECTRIC LIGHT COMPANY, INC.
\$ Revenue Recovery by Rate Sch, DSM Program
Schedule J
June 2006

	<u>Commf</u>	<u>Total</u>
Program Cost, 2000	(0.24)	(0.24)
Revenue Tax on 2000 Program Costs	(0.02)	(0.02)
Lost Margin, 2000	(17.36)	(17.36)
Interest Accrual for (Overcollection)/Undercollection, 2000	(0.41)	(0.41)
Revenue Tax on 2000 Interest	(0.04)	(0.04)
Shareholder Incentives, 2000	0.39	0.39
Revenue Tax on 2000 Shareholder Incentives	0.04	0.04
Program Cost, 2001	0.45	0.45
Revenue Tax on 2001 Program Costs	0.05	0.05
Lost Margin, 2001	(73.73)	(73.73)
Interest Accrual for (Overcollection)/Undercollection, 2001	(4.75)	(4.75)
Revenue Tax on 2001 Interest	(0.47)	(0.47)
Shareholder Incentives, 2001	(137.19)	(137.19)
Revenue Tax on 2001 Shareholder Incentives	(13.38)	(13.38)
Program Cost, 2002	9.18	9.18
Revenue Tax on 2002 Program Costs	0.89	0.89
Lost Margin, 2002	(52.03)	(52.03)
Interest Accrual for (Overcollection)/Undercollection, 2002	(12.48)	(12.48)
Revenue Tax on 2002 Interest	(1.22)	(1.22)
Shareholder Incentives, 2002	(10.47)	(10.47)
Revenue Tax on 2002 Shareholder Incentives	(1.02)	(1.02)
Program Cost, 2003	(136.47)	(136.47)
Revenue Tax on 2003 Program Costs	(13.30)	(13.30)
Lost Margin, 2003	60.40	60.40
Interest Accrual for (Overcollection)/Undercollection, 2003	7.94	7.94
Revenue Tax on 2003 - 04 Interest	0.77	0.77
Shareholder Incentives, 2003	410.65	410.65
Revenue Tax on 2003 Shareholder Incentives	90.52	90.52
Program Cost, 2004	(117.09)	(117.09)
Revenue Tax on 2004 Program Costs	(11.42)	(11.42)
Lost Margin, 2004	2,175.04	2,175.04
Interest Accrual for (Overcollection)/Undercollection, Jan. 2004 - M	(472.04)	(472.04)
Revenue Tax on 2004 - 05 Interest	(46.02)	(46.02)
Shareholder Incentives, 2004	478.35	478.35
Revenue Tax on 2004 Shareholder Incentives	46.64	46.64
Recorded Residential Program Cost, 2005	(6,081.70)	(6,081.70)
Revenue Tax on 2005 Program Costs	(592.97)	(592.97)
Recorded Residential Lost Margin, 2005	7,070.91	7,070.91
Interest Accrual for (Overcollection)/Undercollection, Jan. 2005 - M	2,433.82	2,433.82
Revenue Tax on 2005-06 Interest	237.30	237.30
Recorded Residential Program Shareholder Incentives, 2005	6,685.74	6,685.74
Revenue Tax on 2005 Shareholder Incentives	651.88	651.88
Program Cost, 2006	23,607.92	23,607.92
Revenue Tax on 2006 Program Costs	2,301.77	2,301.77
Lost Margin, 2006	40,484.95	40,484.95
Total	78,959.79	78,959.79

HAWAII ELECTRIC LIGHT COMPANY, INC.
\$ Revenue Recovery by Rate Sch, DSM Program
Schedule U
June 2006

	<u>Comm</u>	<u>Total</u>
Program Cost, 2000	(0.00)	(0.00)
Revenue Tax on 2000 Program Costs	(0.00)	(0.00)
Lost Margin, 2000	(0.11)	(0.11)
Interest Accrual for (Overcollection)/Undercollection, 2000	(0.00)	(0.00)
Revenue Tax on 2000 Interest	(0.00)	(0.00)
Shareholder Incentives, 2000	0.00	0.00
Revenue Tax on 2000 Shareholder Incentives	0.00	0.00
Program Cost, 2001	0.00	0.00
Revenue Tax on 2001 Program Costs	0.00	0.00
Lost Margin, 2001	(0.47)	(0.47)
Interest Accrual for (Overcollection)/Undercollection, 2001	(0.03)	(0.03)
Revenue Tax on 2001 Interest	(0.00)	(0.00)
Shareholder Incentives, 2001	(0.88)	(0.88)
Revenue Tax on 2001 Shareholder Incentives	(0.09)	(0.09)
Program Cost, 2002	0.06	0.06
Revenue Tax on 2002 Program Costs	0.01	0.01
Lost Margin, 2002	(0.33)	(0.33)
Interest Accrual for (Overcollection/Undercollection), 2002	(0.08)	(0.08)
Revenue Tax on 2002 Interest	(0.01)	(0.01)
Shareholder Incentives, 2002	(0.07)	(0.07)
Revenue Tax on 2002 Shareholder Incentives	(0.01)	(0.01)
Program Cost, 2003	(0.87)	(0.87)
Revenue Tax on 2003 Program Costs	(0.09)	(0.09)
Lost Margin, 2003	0.39	0.39
Interest Accrual for (Overcollection/Undercollection), 2003	0.05	0.05
Revenue Tax on 2003 - 04 Interest	0.00	0.00
Shareholder Incentives, 2003	2.63	2.63
Revenue Tax on 2003 Shareholder Incentives	0.58	0.58
Program Cost, 2004	(0.75)	(0.75)
Revenue Tax on 2004 Program Costs	(0.07)	(0.07)
Lost Margin, 2004	13.92	13.92
Interest Accrual for (Overcollection/Undercollection), Jan. 2004 -	(3.02)	(3.02)
Revenue Tax on 2004 - 05 Interest	(0.29)	(0.29)
Shareholder Incentives, 2004	3.06	3.06
Revenue Tax on 2004 Shareholder Incentives	0.30	0.30
Recorded Residential Program Cost, 2005	(38.92)	(38.92)
Revenue Tax on 2005 Program Costs	(3.79)	(3.79)
Recorded Residential Lost Margin, 2005	45.25	45.25
Interest Accrual for (Overcollection)/Undercollection, Jan. 2005 -	15.58	15.58
Revenue Tax on 2005-06 Interest	1.52	1.52
Recorded Residential Program Shareholder Incentives, 2005	42.79	42.79
Revenue Tax on 2005 Shareholder Incentives	4.17	4.17
Program Cost, 2006	151.08	151.08
Revenue Tax on 2006 Program Costs	14.73	14.73
Lost Margin, 2006	259.09	259.09
Total	505.31	505.31

HAWAII ELECTRIC LIGHT COMPANY, INC.
\$ Revenue Recovery by Rate Sch, DSM Program
Schedule H
June 2006

	<u>Comml</u>	<u>Total</u>
Program Cost, 2000	(0.01)	(0.01)
Revenue Tax on 2000 Program Costs	(0.00)	(0.00)
Lost Margin, 2000	(0.39)	(0.39)
Interest Accrual for (Overcollection)/Undercollection, 2000	(0.01)	(0.01)
Revenue Tax on 2000 Interest	(0.00)	(0.00)
Shareholder Incentives, 2000	0.01	0.01
Revenue Tax on 2000 Shareholder Incentives	0.00	0.00
Program Cost, 2001	0.01	0.01
Revenue Tax on 2001 Program Costs	0.00	0.00
Lost Margin, 2001	(1.65)	(1.65)
Interest Accrual for (Overcollection)/Undercollection, 2001	(0.11)	(0.11)
Revenue Tax on 2001 Interest	(0.01)	(0.01)
Shareholder Incentives, 2001	(3.07)	(3.07)
Revenue Tax on 2001 Shareholder Incentives	(0.30)	(0.30)
Program Cost, 2002	0.21	0.21
Revenue Tax on 2002 Program Costs	0.02	0.02
Lost Margin, 2002	(1.17)	(1.17)
Interest Accrual for (Overcollection)/Undercollection, 2002	(0.28)	(0.28)
Revenue Tax on 2002 Interest	(0.03)	(0.03)
Shareholder Incentives, 2002	(0.23)	(0.23)
Revenue Tax on 2002 Shareholder Incentives	(0.02)	(0.02)
Program Cost, 2003	(3.06)	(3.06)
Revenue Tax on 2003 Program Costs	(0.30)	(0.30)
Lost Margin, 2003	1.35	1.35
Interest Accrual for (Overcollection)/Undercollection, 2003	0.18	0.18
Revenue Tax on 2003 - 04 Interest	0.02	0.02
Shareholder Incentives, 2003	9.20	9.20
Revenue Tax on 2003 Shareholder Incentives	2.03	2.03
Program Cost, 2004	(2.62)	(2.62)
Revenue Tax on 2004 Program Costs	(0.26)	(0.26)
Lost Margin, 2004	48.73	48.73
Interest Accrual for (Overcollection)/Undercollection, Jan. 2004 -	(10.58)	(10.58)
Revenue Tax on 2004 - 05 Interest	(1.03)	(1.03)
Shareholder Incentives, 2004	10.72	10.72
Revenue Tax on 2004 Shareholder Incentives	1.04	1.04
Recorded Residential Program Cost, 2005	(136.26)	(136.26)
Revenue Tax on 2005 Program Costs	(13.29)	(13.29)
Recorded Residential Lost Margin, 2005	158.42	158.42
Interest Accrual for (Overcollection)/Undercollection, Jan. 2005 -	54.53	54.53
Revenue Tax on 2005-06 Interest	5.32	5.32
Recorded Residential Program Shareholder Incentives, 2005	149.79	149.79
Revenue Tax on 2005 Shareholder Incentives	14.61	14.61
Program Cost, 2006	528.93	528.93
Revenue Tax on 2006 Program Costs	51.57	51.57
Lost Margin, 2006	907.05	907.05
Total	1,769.06	1,769.06

HAWAII ELECTRIC LIGHT COMPANY, INC.
\$ Revenue Recovery by Rate Sch, DSM Program
Schedule K
June 2006

	<u>Comm1</u>	<u>Total</u>
Program Cost, 2000	(0.01)	(0.01)
Revenue Tax on 2000 Program Costs	(0.00)	(0.00)
Lost Margin, 2000	(0.46)	(0.46)
Interest Accrual for (Overcollection)/Undercollection, 2000	(0.01)	(0.01)
Revenue Tax on 2000 Interest	(0.00)	(0.00)
Shareholder Incentives, 2000	0.01	0.01
Revenue Tax on 2000 Shareholder Incentives	0.00	0.00
Program Cost, 2001	0.01	0.01
Revenue Tax on 2001 Program Costs	0.00	0.00
Lost Margin, 2001	(1.96)	(1.96)
Interest Accrual for (Overcollection)/Undercollection, 2001	(0.13)	(0.13)
Revenue Tax on 2001 Interest	(0.01)	(0.01)
Shareholder Incentives, 2001	(3.65)	(3.65)
Revenue Tax on 2001 Shareholder Incentives	(0.36)	(0.36)
Program Cost, 2002	0.24	0.24
Revenue Tax on 2002 Program Costs	0.02	0.02
Lost Margin, 2002	(1.38)	(1.38)
Interest Accrual for (Overcollection/Undercollection), 2002	(0.33)	(0.33)
Revenue Tax on 2002 Interest	(0.03)	(0.03)
Shareholder Incentives, 2002	(0.28)	(0.28)
Revenue Tax on 2002 Shareholder Incentives	(0.03)	(0.03)
Program Cost, 2003	(3.63)	(3.63)
Revenue Tax on 2003 Program Costs	(0.35)	(0.35)
Lost Margin, 2003	1.61	1.61
Interest Accrual for (Overcollection/Undercollection), 2003	0.21	0.21
Revenue Tax on 2003 - 04 Interest	0.02	0.02
Shareholder Incentives, 2003	10.92	10.92
Revenue Tax on 2003 Shareholder Incentives	2.41	2.41
Program Cost, 2004	(3.11)	(3.11)
Revenue Tax on 2004 Program Costs	(0.30)	(0.30)
Lost Margin, 2004	57.83	57.83
Interest Accrual for (Overcollection/Undercollection), Jan. 2004 -	(12.55)	(12.55)
Revenue Tax on 2004 - 05 Interest	(1.22)	(1.22)
Shareholder Incentives, 2004	12.72	12.72
Revenue Tax on 2004 Shareholder Incentives	1.24	1.24
Recorded Residential Program Cost, 2005	(161.70)	(161.70)
Revenue Tax on 2005 Program Costs	(15.77)	(15.77)
Recorded Residential Lost Margin, 2005	188.00	188.00
Interest Accrual for (Overcollection)/Undercollection, Jan. 2005 -	64.71	64.71
Revenue Tax on 2005-06 Interest	6.31	6.31
Recorded Residential Program Shareholder Incentives, 2005	177.76	177.76
Revenue Tax on 2005 Shareholder Incentives	17.33	17.33
Program Cost, 2006	627.67	627.67
Revenue Tax on 2006 Program Costs	61.20	61.20
Lost Margin, 2006	1,076.38	1,076.38
Total	2,099.32	2,099.32

HAWAII ELECTRIC LIGHT COMPANY, INC.
\$ Revenue Recovery by Rate Sch, DSM Program
Schedule P
June 2006

	<u>Comm1</u>	<u>Total</u>
Program Cost, 2000	(0.19)	(0.19)
Revenue Tax on 2000 Program Costs	(0.02)	(0.02)
Lost Margin, 2000	(13.15)	(13.15)
Interest Accrual for (Overcollection)/Undercollection, 2000	(0.31)	(0.31)
Revenue Tax on 2000 Interest	(0.03)	(0.03)
Shareholder Incentives, 2000	0.30	0.30
Revenue Tax on 2000 Shareholder Incentives	0.03	0.03
Program Cost, 2001	0.34	0.34
Revenue Tax on 2001 Program Costs	0.04	0.04
Lost Margin, 2001	(55.85)	(55.85)
Interest Accrual for (Overcollection)/Undercollection, 2001	(3.60)	(3.60)
Revenue Tax on 2001 Interest	(0.35)	(0.35)
Shareholder Incentives, 2001	(103.92)	(103.92)
Revenue Tax on 2001 Shareholder Incentives	(10.13)	(10.13)
Program Cost, 2002	6.96	6.96
Revenue Tax on 2002 Program Costs	0.68	0.68
Lost Margin, 2002	(39.42)	(39.42)
Interest Accrual for (Overcollection)/Undercollection), 2002	(9.45)	(9.45)
Revenue Tax on 2002 Interest	(0.92)	(0.92)
Shareholder Incentives, 2002	(7.93)	(7.93)
Revenue Tax on 2002 Shareholder Incentives	(0.77)	(0.77)
Program Cost, 2003	(103.38)	(103.38)
Revenue Tax on 2003 Program Costs	(10.08)	(10.08)
Lost Margin, 2003	45.75	45.75
Interest Accrual for (Overcollection)/Undercollection), 2003	6.01	6.01
Revenue Tax on 2003 - 04 Interest	0.59	0.59
Shareholder Incentives, 2003	311.07	311.07
Revenue Tax on 2003 Shareholder Incentives	68.57	68.57
Program Cost, 2004	(88.70)	(88.70)
Revenue Tax on 2004 Program Costs	(8.65)	(8.65)
Lost Margin, 2004	1,647.60	1,647.60
Interest Accrual for (Overcollection)/Undercollection), Jan. 2004 - M	(357.57)	(357.57)
Revenue Tax on 2004 - 05 Interest	(34.86)	(34.86)
Shareholder Incentives, 2004	362.35	362.35
Revenue Tax on 2004 Shareholder Incentives	35.33	35.33
Recorded Residential Program Cost, 2005	(4,606.90)	(4,606.90)
Revenue Tax on 2005 Program Costs	(449.18)	(449.18)
Recorded Residential Lost Margin, 2005	5,356.24	5,356.24
Interest Accrual for (Overcollection)/Undercollection, Jan. 2005 - M	1,843.63	1,843.63
Revenue Tax on 2005-06 Interest	179.75	179.75
Recorded Residential Program Shareholder Incentives, 2005	5,064.47	5,064.47
Revenue Tax on 2005 Shareholder Incentives	493.80	493.80
Program Cost, 2006	17,883.07	17,883.07
Revenue Tax on 2006 Program Costs	1,743.60	1,743.60
Lost Margin, 2006	30,667.47	30,667.47
Total	59,812.28	59,812.28

HAWAII ELECTRIC LIGHT COMPANY, INC.
\$ Revenue Recovery by Rate Sch, DSM Program
Total
June 2006

	<u>Res</u>	<u>Comml</u>	<u>Total</u>
Program Cost, 2000	0.44	(0.52)	(0.08)
Revenue Tax on 2000 Program Costs	0.05	(0.05)	(0.00)
Lost Margin, 2000	232.33	(37.12)	195.21
Interest Accrual for (Overcollection)/Undercollection, 2000	7.07	(0.88)	6.19
Revenue Tax on 2000 Interest	0.69	(0.08)	0.60
Shareholder Incentives, 2000	(0.21)	0.84	0.63
Revenue Tax on 2000 Shareholder Incentives	(0.02)	0.08	0.07
Program Cost, 2001	(1.56)	0.96	(0.60)
Revenue Tax on 2001 Program Costs	(0.15)	0.10	(0.05)
Lost Margin, 2001	813.52	(157.69)	655.83
Interest Accrual for (Overcollection)/Undercollection, 2001	54.33	(10.17)	44.16
Revenue Tax on 2001 Interest	5.29	(1.00)	4.29
Shareholder Incentives, 2001	1,400.85	(293.40)	1,107.45
Revenue Tax on 2001 Shareholder Incentives	136.58	(28.61)	107.98
Program Cost, 2002	1.88	19.64	21.52
Revenue Tax on 2002 Program Costs	0.18	1.91	2.09
Lost Margin, 2002	1,193.03	(111.28)	1,081.75
Interest Accrual for (Overcollection)/Undercollection, 2002	154.43	(26.68)	127.74
Revenue Tax on 2002 Interest	15.06	(2.60)	12.46
Shareholder Incentives, 2002	-	(22.39)	(22.39)
Revenue Tax on 2002 Shareholder Incentives	-	(2.18)	(2.18)
Program Cost, 2003	(175.75)	(291.87)	(467.61)
Revenue Tax on 2003 Program Costs	(17.13)	(28.45)	(45.59)
Lost Margin, 2003	1,339.10	129.16	1,468.27
Interest Accrual for (Overcollection)/Undercollection, 2003	(267.05)	16.97	(250.08)
Revenue Tax on 2003 - 04 Interest	(26.06)	1.65	(24.41)
Shareholder Incentives, 2003	-	878.22	878.22
Revenue Tax on 2003 Shareholder Incentives	-	193.59	193.59
Program Cost, 2004	733.42	(250.41)	483.01
Revenue Tax on 2004 Program Costs	71.51	(24.42)	47.09
Lost Margin, 2004	446.91	4,651.59	5,098.49
Interest Accrual for (Overcollection)/Undercollection, Jan.	(828.41)	(1,009.51)	(1,837.92)
Revenue Tax on 2004 - 05 Interest	(80.73)	(98.41)	(179.14)
Shareholder Incentives, 2004	-	1,023.02	1,023.02
Revenue Tax on 2004 Shareholder Incentives	-	99.75	99.75
Recorded Residential Program Cost, 2005	(8,283.07)	(13,006.43)	(21,289.50)
Revenue Tax on 2005 Program Costs	(807.59)	(1,268.14)	(2,075.73)
Recorded Residential Lost Margin, 2005	(3,087.42)	15,121.99	12,034.56
Interest Accrual for (Overcollection)/Undercollection, Jan.	3,148.34	5,205.02	8,353.36
Revenue Tax on 2005-06 Interest	306.98	507.49	814.47
Recorded Residential Program Shareholder Incentives, 200.	-	14,298.25	14,298.25
Revenue Tax on 2005 Shareholder Incentives	-	1,394.11	1,394.11
Program Cost, 2006	58,799.60	50,488.34	109,287.94
Revenue Tax on 2006 Program Costs	5,732.96	4,922.61	10,655.57
Lost Margin, 2006	34,593.97	86,581.88	121,175.86
Total	95,613.35	168,864.90	264,478.25

Hawaii Electric Light Company, Inc.
 Recorded Lost Margin and Earned Shareholder Incentives
 June YTD 2006

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Lost Margin from 2002 - 2006 Installations (Approved in 2006)

Rate Class	REWH	CIEE	CINC	CICR	Total
Schedule R	\$20,801	\$0	\$0	\$0	\$20,801
Schedule E	\$279	\$0	\$0	\$0	\$279
Schedule G	\$0	\$2,913	\$8,862	\$21	\$11,796
Schedule J	\$0	\$14,004	\$10,638	\$1,569	\$26,211
Schedule H/K	\$0	\$276	\$0	\$0	\$276
Schedule P	\$0	\$1,532	\$4,084	\$1,559	\$7,175
Total	\$21,080	\$18,725	\$23,584	\$3,149	\$66,538

Earned Shareholder Incentives BEFORE TAX - \$

Rate Class	REWH	CIEE	CINC	CICR	Total
Schedule R	\$0	\$0	\$0	\$0	\$0
Schedule E	\$0	\$0	\$0	\$0	\$0
Schedule G	\$0	\$2,497	\$9,080	\$59	\$11,636
Schedule J	\$0	\$15,046	\$14,075	\$3,640	\$32,761
Schedule H/K	\$0	\$871	\$0	\$0	\$871
Schedule P	\$0	\$2,528	\$16,692	\$10,356	\$29,576
Total	\$0	\$20,943	\$39,847	\$14,055	\$74,844

Earned Shareholder Incentives AFTER TAX - \$

Rate Class	REWH	CIEE	CINC	CICR	Total
Schedule R	\$0	\$0	\$0	\$0	\$0
Schedule E	\$0	\$0	\$0	\$0	\$0
Schedule G	\$0	\$1,525	\$5,547	\$36	\$7,108
Schedule J	\$0	\$9,192	\$8,599	\$2,223	\$20,014
Schedule H/K	\$0	\$532	\$0	\$0	\$532
Schedule P	\$0	\$1,544	\$10,197	\$6,326	\$18,068
Total	\$0	\$12,793	\$24,343	\$8,585	\$45,722

CA-IR-110

Ref: T-9, page 42, & HELCO-909 (Other Public Claims).

Please provide the following:

- a. Documentation showing a historical breakdown of the claims payment and accrual history.
- b. Documentation quantifying the \$568,500 budget for 2006.
- c. Documentation showing the calculation of the \$267,000 reduction to arrive at the proposed test year amount.

HELCO Response:

- a. The information requested was provided in HELCO-909, page 3.
- b. The 2006 budget of \$568,500 is comprised of the following:

Public Claims – President’s Office	\$400,000
Public Claims – Legal Services, President’s Office	\$105,000
Public Claims – Administration Dept	\$ 25,000
Others	<u>\$ 38,500</u>
Total	<u>\$568,500</u>

- c. The test year estimate of \$301,500 was based on a historical 5-year average of public claims (excluding customer claims) as follows:

2001	\$ 226,600
2002	\$ 392,000
2003	\$(181,100)
2004	\$1,394,800
2005	<u>\$(219,800)</u>
5-Year Total	<u>\$1,605,400</u>
Annual Average	\$ 321,100
Annual Average Used	\$ 301,500

The \$267,000 adjustment was calculated by taking the \$568,500 budget and adjusting the test year estimate to \$301,500 by \$267,000.

CA-IR-111

Ref: T-9, pages 84-86, & HELCO-WP-918 (Standard Labor Rates).

The referenced testimony generally discusses the use of standard labor rates by HELCO, while HELCO-WP-918 calculates an overtime related adjustment to the standard labor rates. Please provide the following:

- a. Please provide a listing of the standard labor rates, by labor class, input into Pillar for purposes of preparing the 2006 budget.
- b. Are the standard labor rates, by labor class, used by the Company in preparing the 2006 test year forecast different from the standard labor rates input into Pillar for preparing the 2006 budget?
 1. If so, please provide a listing of the standard labor rates, by labor class, input into Pillar for purposes of preparing the 2006 test year forecast.
 2. Please identify and describe the various changes between the standard labor rates used for 2006 general budgeting purposes and 2006 rate case test year purposes.
- c. Please provide a listing of the standard labor rates, by labor class, actually used by HELCO in calendar 2005.
- d. Please confirm that the standard labor rates used for 2006 test year purposes were based on labor hours and payroll dollars for calendar year 2004, which then were adjusted to reflect changes in wage rates and overtime levels through 2006. If this cannot be confirmed, please explain.
- e. Referring to subpart (d) above, please provide a copy of the source documentation supporting the 2004 labor hours and payroll dollars, by labor class.

HELCO Response:

- a. The information requested is attached on page 3.
- b. The standard labor rates, by labor class used in preparing the 2006 test year are the same as used in preparing the 2006 budget.
 1. Not applicable.
 2. Not applicable
- c. The information requested is attached on page 4.
- d. The standard labor rates used in the 2006 test year for bargaining unit personnel were based

on the labor hours and dollars for calendar year 2004 adjusted to reflect changes in wage rates and overtime levels through 2006. For merit employees, only the payroll dollars for calendar year 2004 were used to calculate the standard labor rates for 2006. The labor hours used to calculate the standard labor rates were the labor hours as inputted into the Pillar budgeting system for 2006.

- e. The requested information is voluminous and is available for inspection at HECO's Regulatory Affairs Division office, Suite 1301, Central Pacific Plaza, 220 South King Street, Honolulu, Hawaii. Please contact Dean Matsuura at 543-4622 to make arrangements to inspect the requested information.

Hawaii Electric Light Company, Inc.
Standard Labor Rates - 2006

<u>Labor Class</u>	<u>Rate</u>
__BUOC Prod Rate	24.90
__BUTC Prod Rate	37.30
__E Prod Rate	43.14
__EXEC Prod Rate	78.58
__FS Prod Rate	36.89
__I Prod Rate	20.86
__TC Prod Rate	28.56
__TCS Prod Rate	33.09
D_CREW Prod Rate	34.83
D_CSM Prod Rate	23.95
D_INSPE Prod Rate	34.53
D_MAP Prod Rate	20.72
D_TECHCREW Prod Rate	29.30
D_WAREH Prod Rate	27.39
G_ELEAC Prod Rate	38.01
G_MECHN Prod Rate	35.31
G_WASTW Prod Rate	0.00
W_CD Prod Rate	21.83
W_COMP Prod Rate	30.46
W_CP Prod Rate	29.33
W_DP Prod Rate	29.30
W_ENG Prod Rate	26.51
W_JCP Prod Rate	23.14
W_MAP Prod Rate	20.72
W_PA Prod Rate	21.35
W_RH Prod Rate	23.84
W_SCD Prod Rate	31.55
W_SCP Prod Rate	33.87
W_TT Prod Rate	33.35

Hawaii Electric Light Company, Inc.
Standard Labor Rates - Used In 2005

<u>Labor Class</u>	<u>Rate</u>
__BUOC Prod Rate	20.09
__BUTC Prod Rate	21.51
__E Prod Rate	36.03
__EXEC Prod Rate	70.22
__FS Prod Rate	25.28
__I Prod Rate	16.25
__TC Prod Rate	29.00
__TCS Prod Rate	32.37
D_CREW Prod Rate	24.72
D_CSM Prod Rate	19.58
D_INSPE Prod Rate	31.89
D_MAP Prod Rate	15.18
D_TECHCREW Prod Rate	28.41
D_WAREH Prod Rate	20.94
G_ELEAC Prod Rate	23.75
G_MECHN Prod Rate	26.54
G_WASTW Prod Rate	31.18
W_CD Prod Rate	27.41
W_COMP Prod Rate	28.78
W_CP Prod Rate	26.34
W_DP Prod Rate	30.11
W_ENG Prod Rate	31.11
W_JCP Prod Rate	23.24
W_MAP Prod Rate	15.18
W_PA Prod Rate	17.22
W_RH Prod Rate	21.67
W_SCD Prod Rate	23.79
W_SCP Prod Rate	28.93
W_SDP Prod Rate	30.11
W_TT Prod Rate	30.77

The requested information is voluminous and is available for inspection at HECO's Regulatory Affairs Division office, Suite 1301, Central Pacific Plaza, 220 South King Street, Honolulu, Hawaii. Please contact Dean Matsuura at 543-4622 to make arrangements to inspect the requested information.

CA-IR-112

Ref: T-9, pages 84-86, & HELCO-WP-918 (Standard Labor Rates).

The referenced testimony generally discusses the use of standard labor rates by HELCO for accounting and budgeting purposes. Please provide the following

- a. Please provide the integrated electronic spreadsheet files (i.e., with cell formulae, workbook tabs and links to other files intact and not converted to values) and other supporting documents used in developing the standard labor rates (hours and dollars), by labor class, actually used by HELCO in preparing the 2006 rate case test year forecast. Such documentation should support and clearly show how wage increases and overtime adjustments were considered in developing the standard labor rates, by labor class.
- b. In quantifying the Standard Labor Rates applied in the 2006 test year forecast, did HELCO develop said rates by dividing actual 2004 regular and overtime pay (as adjusted for subsequent wage and salary increases) by actual 2004 productive hours? Please explain.
- c. Referring to subpart (b) above, does the calculation of the standard labor rate exclude both nonproductive pay and hours from the numerator and denominator? Please explain.
- d. Referring to subpart (c), please confirm that the calculated standard labor rate, based on productive pay and hours, is also applied to nonproductive hours in the Company's 2006 test year forecast. If this cannot be confirmed, please explain.

HELCO Response:

- a. The information requested is attached on pages 3 – 16.
- b. In quantifying the Standard Labor Rates applied in the 2006 test year forecast, as a starting point, HELCO divided actual 2004 regular and overtime pay (as adjusted for subsequent wage and salary increases) by actual 2004 productive hours, subject first to adjustments each department may have made to the 2004 payroll information. For example, the 2004 payroll information will not include information for new positions included in the 2006 test year. In such a case, estimated labor dollars and hours were provided by each department for type of adjustment and such information was incorporated into the calculation of the standard labor rates.

- c. Yes, the calculation of the standard labor rate exclude both nonproductive pay and hours from the numerator and denominator.
- d. Yes, the calculated standard labor rate, based on productive pay and hours, is also applied to nonproductive hours in the Company's 2006 test year forecast.

Global Name	A	B	C=A+B	D=A+C	2005	2006
	Un- Adjtd 2004	SLR Adj % 2004	SLR Adj \$ 2004	Adjtd 2004		
__BUOC NPW Rate (BU-Off & Clerical-No OH Load)	24.35	-2.15%	-0.52	23.83	24.12	24.90
__BUOC Prod Rate (BU-Off & Clerical-No OH Load)	24.35	-2.15%	-0.52	23.83	24.12	24.90
__BUOCCE NPW Rate (BU-Off & Clerical-Customer Engineering)	24.35	-2.15%	-0.52	23.83	24.12	24.90
__BUOCCE Prod Rate (BU-Off & Clerical-Customer Engineering)	24.35	-2.15%	-0.52	23.83	24.12	24.90
__BUOCED NPW Rate (BU-Off & Clerical-Energy Delivery)	24.35	-2.15%	-0.52	23.83	24.12	24.90
__BUOCED Prod Rate (BU-Off & Clerical-Energy Delivery)	24.35	-2.15%	-0.52	23.83	24.12	24.90
__BUTC NPW Rate (BU-Trade & Craft-No OH Load)	36.48	-2.15%	-0.78	35.70	36.14	37.30
__BUTC Prod Rate (BU-Trade & Craft-No OH Load)	36.48	-2.15%	-0.78	35.70	36.14	37.30
__BUTCCE NPW Rate (BU-Trade & Craft-Customer Engineering)	36.48	-2.15%	-0.78	35.70	36.14	37.30
__BUTCCE Prod Rate (BU-Trade & Craft-Customer Engineering)	36.48	-2.15%	-0.78	35.70	36.14	37.30
__BUTCED NPW Rate (BU-Trade & Craft-Energy Delivery)	36.48	-2.15%	-0.78	35.70	36.14	37.30
__BUTCED Prod Rate (BU-Trade & Craft-Energy Delivery)	36.48	-2.15%	-0.78	35.70	36.14	37.30
D_CREW NPW Rate (Crew)	34.07	-2.15%	-0.73	33.34	33.75	34.83
D_CREW Prod Rate (Crew)	34.07	-2.15%	-0.73	33.34	33.75	34.83
D_CSM NPW Rate (Cust Srv Meter Reading)	23.42	-2.15%	-0.50	22.92	23.20	23.95
D_CSM Prod Rate (Cust Srv Meter Reading)	23.42	-2.15%	-0.50	22.92	23.20	23.95
D_CSM-ED NPW Rate (Cust Srv Meter Reading-Energy Delivery)	23.42	-2.15%	-0.50	22.92	23.20	23.95
D_CSM-ED Prod Rate (Cust Srv Meter Reading-Energy Delivery)	23.42	-2.15%	-0.50	22.92	23.20	23.95
D_INSPE NPW Rate (Inspector)	33.77	-2.15%	-0.73	33.04	33.46	34.53
D_INSPE Prod Rate (Inspector)	33.77	-2.15%	-0.73	33.04	33.46	34.53
D_MAP NPW Rate (Mapper)	20.27	-2.15%	-0.44	19.83	20.08	20.72
D_MAP Prod Rate (Mapper)	20.27	-2.15%	-0.44	19.83	20.08	20.72
D_TECHCREW NPW Rate (Technical Crew)	28.66	-2.15%	-0.62	28.04	28.39	29.30
D_TECHCREW Prod Rate (Technical Crew)	28.66	-2.15%	-0.62	28.04	28.39	29.30
D_WAREH NPW Rate (Warehouse)	26.79	-2.15%	-0.58	26.21	26.54	27.39
D_WAREH Prod Rate (Warehouse)	26.79	-2.15%	-0.58	26.21	26.54	27.39
G_ELEAC NPW Rate (Electrical/Auto Controls)	37.18	-2.15%	-0.80	36.38	36.84	38.01
G_ELEAC Prod Rate (Electrical/Auto Controls)	37.18	-2.15%	-0.80	36.38	36.84	38.01
G_MECHN NPW Rate (Mechanical)	34.54	-2.15%	-0.74	33.80	34.22	35.31
G_MECHN Prod Rate (Mechanical)	34.54	-2.15%	-0.74	33.80	34.22	35.31
W_CP NPW Rate (Customer Planner-No OH Load)	28.69	-2.15%	-0.62	28.07	28.42	29.33
W_CP Prod Rate (Customer Planner-No OH Load)	28.69	-2.15%	-0.62	28.07	28.42	29.33
W_CP-CE NPW Rate (Customer Planner-Customer Engineering)	28.69	-2.15%	-0.62	28.07	28.42	29.33
W_CP-CE Prod Rate (Customer Planner-Customer Engineering)	28.69	-2.15%	-0.62	28.07	28.42	29.33
W_CP-ED NPW Rate (Customer Planner-Energy Delivery)	28.69	-2.15%	-0.62	28.07	28.42	29.33
W_CP-ED Prod Rate (Customer Planner-Energy Delivery)	28.69	-2.15%	-0.62	28.07	28.42	29.33
W_DP NPW Rate (Design Planner-No OH Load)	28.66	-2.15%	-0.62	28.04	28.39	29.30
W_DP Prod Rate (Design Planner-No OH Load)	28.66	-2.15%	-0.62	28.04	28.39	29.30
W_DP-CE NPW Rate (Design Planner-Customer Engineering)	28.66	-2.15%	-0.62	28.04	28.39	29.30
W_DP-CE Prod Rate (Design Planner-Customer Engineering)	28.66	-2.15%	-0.62	28.04	28.39	29.30
W_DP-ED NPW Rate (Design Planner-Energy Delivery)	28.66	-2.15%	-0.62	28.04	28.39	29.30
W_DP-ED Prod Rate (Design Planner-Energy Delivery)	28.66	-2.15%	-0.62	28.04	28.39	29.30
W_JCP NPW Rate (Jr Customer Planner-No OH Load)	22.63	-2.15%	-0.49	22.14	22.42	23.14
W_JCP Prod Rate (Jr Customer Planner-No OH Load)	22.63	-2.15%	-0.49	22.14	22.42	23.14
W_JCP-CE NPW Rate (Jr Customer Planner-Customer Engineering)	22.63	-2.15%	-0.49	22.14	22.42	23.14
W_JCP-CE Prod Rate (Jr Customer Planner-Customer Engineerin)	22.63	-2.15%	-0.49	22.14	22.42	23.14
W_JCP-ED NPW Rate (Jr Customer Planner-Energy Delivery)	22.63	-2.15%	-0.49	22.14	22.42	23.14
W_JCP-ED Prod Rate (Jr Customer Planner-Energy Delivery)	22.63	-2.15%	-0.49	22.14	22.42	23.14
W_MAP NPW Rate (Mapper-No OH Load)	20.27	-2.15%	-0.44	19.83	20.08	20.72
W_MAP Prod Rate (Mapper-No OH Load)	20.27	-2.15%	-0.44	19.83	20.08	20.72
W_MAP-CE NPW Rate (Mapper-Customer Engineering)	20.27	-2.15%	-0.44	19.83	20.08	20.72

Global Name	A Un- Adjtd 2004	B SLR Adj % 2004	C=A+B SLR Adj \$ 2004	D=A+C Adjtd 2004	2005	2006
__BUOC NPW Rate (BU-Off & Clerical-No OH Load)	24.35	-2.15%	-0.52	23.83	24.12	24.90
W_MAP-CE Prod Rate (Mapper-Customer Engineering)	20.27	-2.15%	-0.44	19.83	20.08	20.72
W_MAP-ED NPW Rate (Mapper-Energy Delivery)	20.27	-2.15%	-0.44	19.83	20.08	20.72
W_MAP-ED Prod Rate (Mapper-Energy Delivery)	20.27	-2.15%	-0.44	19.83	20.08	20.72
W_PA NPW Rate (Planner Aid-No OH Load)	20.88	-2.15%	-0.45	20.43	20.69	21.35
W_PA Prod Rate (Planner Aid-No OH Load)	20.88	-2.15%	-0.45	20.43	20.69	21.35
W_PA-CE NPW Rate (Planner Aid-Customer Engineering)	20.88	-2.15%	-0.45	20.43	20.69	21.35
W_PA-CE Prod Rate (Planner Aid-Customer Engineering)	20.88	-2.15%	-0.45	20.43	20.69	21.35
W_PA-ED NPW Rate (Planner Aid-Energy Delivery)	20.88	-2.15%	-0.45	20.43	20.69	21.35
W_PA-ED Prod Rate (Planner Aid-Energy Delivery)	20.88	-2.15%	-0.45	20.43	20.69	21.35
W_RH NPW Rate (Rodman Helper-No OH Load)	23.32	-2.15%	-0.50	22.82	23.10	23.84
W_RH Prod Rate (Rodman Helper-No OH Load)	23.32	-2.15%	-0.50	22.82	23.10	23.84
W_RH-CE NPW Rate (Rodman Helper-Customer Engineering)	23.32	-2.15%	-0.50	22.82	23.10	23.84
W_RH-CE Prod Rate (Rodman Helper-Customer Engineering)	23.32	-2.15%	-0.50	22.82	23.10	23.84
W_RH-ED NPW Rate (Rodman Helper-Energy Delivery)	23.32	-2.15%	-0.50	22.82	23.10	23.84
W_RH-ED Prod Rate (Rodman Helper-Energy Delivery)	23.32	-2.15%	-0.50	22.82	23.10	23.84
W_SCD NPW Rate (Sub/Com Drafting-No OH Load)	30.86	-2.15%	-0.66	30.20	30.57	31.55
W_SCD Prod Rate (Sub/Com Drafting-No OH Load)	30.86	-2.15%	-0.66	30.20	30.57	31.55
W_SCD-CE NPW Rate (Sub/Com Drafting-Customer Engineering)	30.86	-2.15%	-0.66	30.20	30.57	31.55
W_SCD-CE Prod Rate (Sub/Com Drafting-Customer Engineering)	30.86	-2.15%	-0.66	30.20	30.57	31.55
W_SCD-ED NPW Rate (Sub/Com Drafting-Energy Delivery)	30.86	-2.15%	-0.66	30.20	30.57	31.55
W_SCD-ED Prod Rate (Sub/Com Drafting-Energy Delivery)	30.86	-2.15%	-0.66	30.20	30.57	31.55
W_SCP NPW Rate (Sr Customer Planner-No OH Load)	33.13	-2.15%	-0.71	32.42	32.82	33.87
W_SCP Prod Rate (Sr Customer Planner-No OH Load)	33.13	-2.15%	-0.71	32.42	32.82	33.87
W_SCP-CE NPW Rate (Sr Customer Planner-Customer Engineering)	33.13	-2.15%	-0.71	32.42	32.82	33.87
W_SCP-CE Prod Rate (Sr Customer Planner-Customer Engineerin)	33.13	-2.15%	-0.71	32.42	32.82	33.87
W_SCP-ED NPW Rate (Sr Customer Planner-Energy Delivery)	33.13	-2.15%	-0.71	32.42	32.82	33.87
W_SCP-ED Prod Rate (Sr Customer Planner-Energy Delivery)	33.13	-2.15%	-0.71	32.42	32.82	33.87
W_TT NPW Rate (Transit Technician-No OH Load)	32.62	-2.15%	-0.70	31.92	32.32	33.35
W_TT Prod Rate (Transit Technician-No OH Load)	32.62	-2.15%	-0.70	31.92	32.32	33.35
W_TT-CE NPW Rate (Transit Technician-Customer Engineering)	32.62	-2.15%	-0.70	31.92	32.32	33.35
W_TT-CE Prod Rate (Transit Technician-Customer Engineering)	32.62	-2.15%	-0.70	31.92	32.32	33.35
W_TT-ED NPW Rate (Transit Technician-Energy Delivery)	32.62	-2.15%	-0.70	31.92	32.32	33.35
W_TT-ED Prod Rate (Transit Technician-Energy Delivery)	32.62	-2.15%	-0.70	31.92	32.32	33.35
TOTAL	2335.6	-1.806	-50.215	2285.37	2313.9	2388
% Change				-2.15%	1.25%	3.20%

Inflation Factor

0.0125 0.032

2004 2005 2006 2007 2008 2009 2010

Pillar Hours

Classification	Data	Total
CD-CE	Sum of Amount	\$ 174,643.42
	Sum of Prod Hrs	5204
COMP	Sum of Amount	\$ 323,574.26
	Sum of Prod Hrs	11478
ENG	Sum of Amount	\$ 354,183.91
	Sum of Prod Hrs	11494
E-V	Sum of Amount	\$ 620,697.17
	Sum of Prod Hrs	13847
EXEC	Sum of Amount	\$ 181,045.09
	Sum of Prod Hrs	2208
FS	Sum of Amount	\$ 548,808.59
	Sum of Prod Hrs	13835
I	Sum of Amount	\$ 370,767.31
	Sum of Prod Hrs	17184
TC	Sum of Amount	\$ 1,908,956.01
	Sum of Prod Hrs	67454
TCS	Sum of Amount	\$ 2,727,601.39
	Sum of Prod Hrs	82252
Total Sum of Amount		\$ 7,210,277.15
Total Sum of Prod Hrs		224955

8501.8	20.54	21.04	21.83	22.65	23.50	24.38	25.29
11288.1	28.67	29.36	30.46	31.60	32.79	34.02	35.29
14195.5	24.95	25.55	26.51	27.51	28.54	29.61	30.72
15286.5	40.60	41.59	43.14	44.76	46.44	48.18	49.99
2448.0	73.96	75.74	78.58	81.53	84.59	87.76	91.05
15806.3	34.72	35.56	36.89	38.28	39.71	41.20	42.75
18886.6	19.63	20.11	20.86	21.64	22.45	23.30	24.17
71033.0	26.87	27.52	28.56	29.63	30.74	31.89	33.09
87581.8	31.14	31.90	33.09	34.33	35.62	36.96	38.34

	0.024167	0.0375	0.0375	0.0375	0.0375	0.0375	0.0375
301.09	308.36	319.93	331.93	344.37	357.29	370.68	370.68
	0.024167	0.0375	0.0375	0.0375	0.0375	0.0375	0.0375

Proof:
Total
%

2004 2005 2006 2007 2008 2009 2010

Pillar Hours Info
 ONLY

LAB_COST_CLASS	Data	Total	2004	2005	2006	2007	2008	2009	2010
BUOC	Sum of Amount	\$ 1,650,349.19	24.35	24.66	25.45	26.34	27.26	28.19	29.12
	Sum of Prod Hrs	67763							
BUTC	Sum of Amount	\$ 5,201,522.02	36.48	36.93	38.11	39.45	40.83	42.22	43.61
	Sum of Prod Hrs	142600							
CP-CE	Sum of Amount	\$ 312,930.90	28.69	29.05	29.98	31.03	32.11	33.20	34.30
	Sum of Prod Hrs	10908							
CREW	Sum of Amount	\$ 5,052,858.84	34.07	34.49	35.60	36.84	38.13	39.43	40.73
	Sum of Prod Hrs	148317							
CSM	Sum of Amount	\$ 910,412.81	23.42	23.71	24.47	25.33	26.21	27.10	28.00
	Sum of Prod Hrs	38875							
DP-ED	Sum of Amount	\$ 107,189.94	28.66	29.02	29.95	31.00	32.08	33.17	34.27
	Sum of Prod Hrs	3740							
ELEAC	Sum of Amount	\$ 555,994.01	37.18	37.64	38.85	40.21	41.61	43.03	44.45
	Sum of Prod Hrs	14955							
INSPE	Sum of Amount	\$ 266,073.88	33.77	34.19	35.28	36.52	37.80	39.08	40.37
	Sum of Prod Hrs	7880							
JCP-CE	Sum of Amount	\$ 249,266.60	22.63	22.91	23.64	24.47	25.33	26.19	27.05
	Sum of Prod Hrs	11017							
MECHN	Sum of Amount	\$ 780,160.36	34.54	34.98	36.10	37.36	38.67	39.98	41.30
	Sum of Prod Hrs	22584							
PA-CE	Sum of Amount	\$ 197,584.20	20.88	21.15	21.82	22.59	23.38	24.17	24.97
	Sum of Prod Hrs	9461							
RH-ED	Sum of Amount	\$ 44,978.81	23.32	23.61	24.37	25.22	26.11	26.99	27.88
	Sum of Prod Hrs	1929							
SCD	Sum of Amount	\$ 169,416.18	30.86	31.25	32.25	33.38	34.55	35.72	36.90
	Sum of Prod Hrs	5489							
SCP-CE	Sum of Amount	\$ 297,030.66	33.13	33.55	34.62	35.83	37.09	38.35	39.61
	Sum of Prod Hrs	8965							
TECREW	Sum of Amount	\$ 1,167,427.55	28.66	29.02	29.95	31.00	32.08	33.17	34.27
	Sum of Prod Hrs	40732							
TT-ED	Sum of Amount	\$ 58,992.65	32.62	33.03	34.09	35.28	36.52	37.76	39.00
	Sum of Prod Hrs	1839							
WAREH	Sum of Amount	\$ 324,145.44	26.79	27.12	27.99	28.97	29.99	31.01	32.03
	Sum of Prod Hrs	12100							
WMAP	Sum of Amount	\$ 119,602.03	20.27	20.52	21.18	21.92	22.69	23.46	24.23
	Sum of Prod Hrs	5901							
Total Sum of Amount		\$ 17,466,936.07							
Total Sum of Prod Hrs		555053							
Proof:									
Total			520.33	526.84	543.69	562.72	582.42	602.22	622.09
%			0.0125	0.0125	0.0320	0.0350	0.0350	0.0340	0.0330

CA-IR-112
DOCKET NO. 05-0315
PAGES 7-16 OF 16
(Revised 11/14/06)

The requested information is confidential and will be provided pursuant to Protective Order No. 22593, dated June 30, 2006.

CA-IR-113

Ref: T-9, pages 84-86, & HELCO-WP-918 (Standard Labor Rates).

Referring to HELCO-WP-918, the overtime adjustment appears to calculate a percentage change in the labor rate, by labor class, premised solely on productive time. Please explain how this percentage change calculation provides for the correction of overtime pay embedded in the standard labor rate that is otherwise applied to nonproductive hours.

HELCO Response:

In responding to this IR, it is HELCO's understanding that the CA is questioning whether the overtime adjustment effectively provides for the costing of nonproductive labor hours at straight time labor rates (i.e. the standard labor rates as calculated are applied to nonproductive hours).

HELCO acknowledges that applying the adjusted standard labor rates to nonproductive hours may be overstating the nonproductive labor costs. However, the methodology does not result in a significant overstatement. The NPW on-cost rate, which is based on applying the calculated standard labor rates (as shown in HELCO's response to CA-IR-111) to the NPW hours in the Pillar budgeting system to arrive at the NPW cost pool, is \$4.30 per hour for the test year 2006. As a rough comparison, increasing the recorded 2005 NPW rate of \$4.06 by the weighted average wage increases for 2006 of 3.36% (as shown in HELCO-904) produces a 2006 rate of \$4.20, which is \$0.10 per hour less than the \$4.30 for test year 2006. The total productive labor hours charged to O&M expenses for the 2006 test year is 495,965 hours, giving us a potential adjustment of approximately \$49,600 to O&M expenses. HELCO believes that no rate case adjustment should be made since the potential overstatement amount for NPW is not significant. In addition, as noted in HELCO T-9, pages 84 – 86 and HELCO-WP-918, pages 8 - 9, the test year 2006 labor costs are more likely to be understated. This understatement should

more than offset the potential overstatement in applying the standard labor rates to the nonproductive hours.

CA-IR-114

Ref: T-9, pages 82-84, & HELCO-904 (Wage Increase & Standard Labor Rates).

The referenced testimony generally discusses the general wage increases included in the 2006 budget and refers to HELCO-904 for the bargaining unit and merit increases. Please provide the following:

- a. Were the wage increase factors set forth on HELCO-904 actually applied in quantifying the standard labor rates input into Pillar for the 2006 test year forecast? If not, please explain.
- b. If the response to subpart (a) above is negative, please provide a schedule similar to HELCO-904 showing the development of the factors used to escalate the 2004 wage base, by labor class, to the 2006 wage base.

HELCO Response:

- a. Yes.
- b. Not applicable.

CA-IR-115

Ref: T-9, pages 84-86, & HELCO-WP-918 (Standard Labor Rates).

HELCO-WP-918 adjusts 2004 historical labor rates, by labor class, in order to restate overtime included in the standard labor rates consistent with 2006 budget year conditions. Using the BUOC labor class for illustration purposes, please provide the following:

- a. Please confirm the above summary. If this cannot be confirmed, please explain.
- b. Please confirm that the “hours” (i.e., total supply, NPW, total productive, overtime, etc.) shown on the left side of HELCO-WP-918 represent HELCO’s 2006 rate case forecast. If this cannot be confirmed, please explain.
- c. The 2006 Total Supply Hours (83,200), Total NPW Hours (11,587) and Total Productive Hours (75,488) represent input values in the spreadsheet file (“918WP.xls”) supporting HELCO-WP-918. Please provide the following:
 1. Please identify the data source(s) for these input hours.
 2. If the response to part (c)(1) of this information request identifies departmental resource leveling reports supporting the 2006 budget, please provide a copy of all resource leveling reports (i.e., both hard copy and spreadsheet files with intact formulae) for each Department and clearly show how that data was used to quantify the 2006 input values on HELCO-WP-918.
 3. If the response to part (c)(1) of this information request identifies data sources other than departmental resource leveling reports, please provide a copy of the identified source documents (i.e., both hard copy and spreadsheet files with intact formulae) for each Department and clearly show how that data was used to quantify the 2006 input values on HELCO-WP-918.

HELCO Response:

- a. Confirmed that HELCO-WP-918 adjusts 2004 historical payroll labor rates, by labor class, in order to restate overtime included in the standard labor rates consistent with 2006 budget year conditions.
- b. Confirmed that the “hours” (i.e., total supply, NPW, total productive, overtime, etc.) shown on the left side of HELCO-WP-918 represent HELCO’s 2006 rate case forecast.

- c.
 1. The data source for the information provided is the final department resource leveling reports.
 2. The final department resource leveling reports, sorted by company/labor class and also by department/labor class is provided on pages 3 – 15.
 3. See responses to items c.1. and c.2.

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	LC_RL	*EE #	FY06
BU	__BUOC	*Supply	(83,200.00)
BU	__BUOC	107	11,587.00
BU	__BUOC	150	75,487.96
BU	__BUTC	*Supply	(128,960.00)
BU	__BUTC	107	19,408.00
BU	__BUTC	108	775.00
BU	__BUTC	150	148,885.00
BU	D_CREW	*Supply	(135,200.00)
BU	D_CREW	107	18,944.00
BU	D_CREW	150	106,641.81
BU	D_CSM	*Supply	(37,440.00)
BU	D_CSM	107	5,276.00
BU	D_CSM	150	33,213.00
BU	D_INSPE	*Supply	(8,320.00)
BU	D_INSPE	107	1,360.00
BU	D_INSPE	150	5,377.98
BU	D_TECHCI	*Supply	(43,680.00)
BU	D_TECHCI	107	5,744.00
BU	D_TECHCI	150	42,724.69
BU	D_WAREH	*Supply	(12,480.00)
BU	D_WAREH	107	1,792.00
BU	D_WAREH	150	12,100.01
BU	G_ELEAC	*Supply	(12,480.00)
BU	G_ELEAC	107	2,314.00
BU	G_ELEAC	108	75.00
BU	G_ELEAC	150	16,831.00
BU	G_MECHN	*Supply	(22,880.00)
BU	G_MECHN	107	2,980.00
BU	G_MECHN	108	125.00
BU	G_MECHN	150	24,609.00
BU	W_CP	*Supply	(12,480.00)
BU	W_CP	107	1,433.04
BU	W_CP	150	13,402.76
BU	W_DP	*Supply	(4,160.00)
BU	W_DP	107	440.04
BU	W_DP	150	4,476.44
BU	W_JCP	*Supply	(12,480.00)
BU	W_JCP	107	1,024.92
BU	W_JCP	150	13,732.83
BU	W_MAP	*Supply	(6,240.00)
BU	W_MAP	107	552.00
BU	W_MAP	150	5,820.28
BU	W_PA	*Supply	(10,400.00)
BU	W_PA	107	1,130.04
BU	W_PA	150	9,520.95
BU	W_RH	*Supply	(2,080.00)
BU	W_RH	107	240.00
BU	W_RH	150	2,608.63
BU	W_SCD	*Supply	(8,320.00)

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	LC_RL	*EE #	FY06
BU	W_SCD	107	1,281.96
BU	W_SCD	150	10,086.14
BU	W_SCP	*Supply	(10,400.00)
BU	W_SCP	107	1,616.04
BU	W_SCP	150	10,853.77
BU	W_TT	*Supply	(2,080.00)
BU	W_TT	107	279.96
BU	W_TT	150	2,313.67
Merit	__E	*Supply	(14,560.00)
Merit	__E	107	1,693.04
Merit	__E	150	15,246.51
Merit	__EXEC	*Supply	(2,080.00)
Merit	__EXEC	107	112.00
Merit	__EXEC	150	2,448.00
Merit	__FS	*Supply	(14,560.00)
Merit	__FS	107	2,118.08
Merit	__FS	150	15,769.62
Merit	__I	*Supply	(18,720.00)
Merit	__I	107	1,695.96
Merit	__I	150	17,922.38
Merit	__TC	*Supply	(72,800.00)
Merit	__TC	107	8,482.67
Merit	__TC	150	72,251.68
Merit	__TCS	*Supply	(79,040.00)
Merit	__TCS	107	10,897.00
Merit	__TCS	108	75.00
Merit	__TCS	150	88,392.98
Merit	W_CD	*Supply	(6,240.00)
Merit	W_CD	107	904.08
Merit	W_CD	150	7,134.53
Merit	W_COMP	*Supply	(12,480.00)
Merit	W_COMP	107	1,264.08
Merit	W_COMP	150	11,288.08
Merit	W_ENG	*Supply	(10,400.00)
Merit	W_ENG	107	1,215.96
Merit	W_ENG	150	15,199.14
			107,014.71

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<u>Dept</u>	<u>*RA #</u>	<u>LC RL</u>	<u>*EE #</u>	<u>FY06</u>
Accounting	HAA	__E	*Supply	(2,080.00)
Accounting	HAA	__E	107	200.00
Accounting	HAA	__E	150	2,360.00
		__E Total		480.00
Accounting	HAA	__TC	*Supply	(8,320.00)
Accounting	HAA	__TC	107	904.00
Accounting	HAA	__TC	150	10,442.00
		__TC Total		3,026.00
Accounting	HAA	__TCS	*Supply	(2,080.00)
Accounting	HAA	__TCS	107	240.00
Accounting	HAA	__TCS	150	2,032.00
		__TCS Total		192.00
Accounting	HAB	__TC	*Supply	(2,080.00)
Accounting	HAB	__TC	107	260.00
Accounting	HAB	__TC	150	1,788.00
		__TC Total		(32.00)
Accounting	HAC	__BUOC	*Supply	(6,240.00)
Accounting	HAC	__BUOC	107	856.00
Accounting	HAC	__BUOC	150	5,434.00
		__BUOC Total		50.00
Accounting	HAC	__TC	*Supply	(2,080.00)
Accounting	HAC	__TC	107	232.00
Accounting	HAC	__TC	150	2,032.00
		__TC Total		184.00
Accounting	HAC	__TCS	*Supply	(2,080.00)
Accounting	HAC	__TCS	107	232.00
Accounting	HAC	__TCS	150	2,272.00
		__TCS Total		424.00
Accounting	HAM	__TC	*Supply	(2,080.00)
Accounting	HAM	__TC	107	272.00
Accounting	HAM	__TC	150	2,219.31
		__TC Total		411.31
Accounting	HAM	__TCS	*Supply	(2,080.00)
Accounting	HAM	__TCS	107	272.00
Accounting	HAM	__TCS	150	2,110.00
		__TCS Total		302.00
Accounting	HAP	__BUOC	*Supply	(2,080.00)
Accounting	HAP	__BUOC	107	312.00
Accounting	HAP	__BUOC	150	1,990.00
		__BUOC Total		222.00
Accounting	HAP	__TC	*Supply	(2,080.00)
Accounting	HAP	__TC	107	192.00
Accounting	HAP	__TC	150	2,088.00
		__TC Total		200.00
Accounting	HAP	__TCS	*Supply	(2,080.00)
Accounting	HAP	__TCS	107	232.00
Accounting	HAP	__TCS	150	2,469.00
		__TCS Total		621.00

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<u>Dept</u>	<u>*RA #</u>	<u>LC RL</u>	<u>*EE #</u>	<u>FY06</u>
Admin	HNA	__E	*Supply	(2,080.00)
Admin	HNA	__E	107	176.00
Admin	HNA	__E	150	2,724.04
		__E Total		820.04
Admin	HNA	__I	*Supply	(4,160.00)
Admin	HNA	__I	107	336.00
Admin	HNA	__I	150	3,916.08
		__I Total		92.08
Admin	HNA	__TC	*Supply	(2,080.00)
Admin	HNA	__TC	107	200.00
Admin	HNA	__TC	150	1,551.00
		__TC Total		(329.00)
Admin	HNF	__TC	*Supply	(2,080.00)
Admin	HNF	__TC	107	192.00
Admin	HNF	__TC	150	2,240.50
		__TC Total		352.50
Admin	HNL	__TC	*Supply	(4,160.00)
Admin	HNL	__TC	107	488.00
Admin	HNL	__TC	150	3,684.00
		__TC Total		12.00
Admin	HNL	__TCS	*Supply	(2,080.00)
Admin	HNL	__TCS	107	264.00
Admin	HNL	__TCS	150	1,824.00
		__TCS Total		8.00
Admin	HNP	__I	*Supply	(2,080.00)
Admin	HNP	__I	107	192.00
Admin	HNP	__I	150	1,950.00
		__I Total		62.00
Admin	HNP	__TC	*Supply	(4,160.00)
Admin	HNP	__TC	107	464.00
Admin	HNP	__TC	150	5,015.93
		__TC Total		1,319.93
Admin	HNS	__I	*Supply	(2,080.00)
Admin	HNS	__I	107	151.96
Admin	HNS	__I	150	1,928.04
		__I Total		0.00
Admin	HNS	__TC	*Supply	(6,240.00)
Admin	HNS	__TC	107	735.67
Admin	HNS	__TC	150	5,503.80
		__TC Total		(0.53)
Admin	HNS	__TCS	*Supply	(2,080.00)
Admin	HNS	__TCS	107	192.04
Admin	HNS	__TCS	150	1,888.08

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<u>Dept</u>	<u>*RA #</u>	<u>LC RL</u>	<u>*EE #</u>	<u>FY06</u>
		__TCS Total		0.12
Cust Svc	HCA	__E	*Supply	(2,080.00)
Cust Svc	HCA	__E	107	280.00
Cust Svc	HCA	__E	150	2,237.00
		__E Total		437.00
Cust Svc	HCH	__BUOC	*Supply	(16,640.00)
Cust Svc	HCH	__BUOC	107	2,296.00
Cust Svc	HCH	__BUOC	150	14,808.00
		__BUOC Total		464.00
Cust Svc	HCK	__TCS	*Supply	(2,080.00)
Cust Svc	HCK	__TCS	107	232.00
Cust Svc	HCK	__TCS	150	2,107.00
		__TCS Total		259.00
Cust Svc	HCK	D_CSM	*Supply	(24,960.00)
Cust Svc	HCK	D_CSM	107	3,444.00
Cust Svc	HCK	D_CSM	150	22,270.00
		D_CSM Total		754.00
Cust Svc	HCR	__BUOC	*Supply	(20,800.00)
Cust Svc	HCR	__BUOC	107	3,000.00
Cust Svc	HCR	__BUOC	150	18,864.00
		__BUOC Total		1,064.00
Cust Svc	HCR	__TCS	*Supply	(2,080.00)
Cust Svc	HCR	__TCS	107	232.00
Cust Svc	HCR	__TCS	150	1,980.00
		__TCS Total		132.00
Cust Svc	HCW	D_CSM	*Supply	(12,480.00)
Cust Svc	HCW	D_CSM	107	1,832.00
Cust Svc	HCW	D_CSM	150	10,943.00
		D_CSM Total		295.00
Distributn	HDA	__E	*Supply	(2,080.00)
Distributn	HDA	__E	107	296.00
Distributn	HDA	__E	150	1,994.50
		__E Total		210.50
Distributn	HDA	__TC	*Supply	(6,240.00)
Distributn	HDA	__TC	107	736.00
Distributn	HDA	__TC	150	5,768.50
		__TC Total		264.50
Distributn	HDC	__BUOC	*Supply	(2,080.00)
Distributn	HDC	__BUOC	107	622.00
Distributn	HDC	__BUOC	150	1,470.00
		__BUOC Total		12.00
Distributn	HDC	__FS	*Supply	(2,080.00)
Distributn	HDC	__FS	107	296.00
Distributn	HDC	__FS	150	2,378.84
		__FS Total		594.84
Distributn	HDC	__TCS	*Supply	(4,160.00)
Distributn	HDC	__TCS	107	472.00
Distributn	HDC	__TCS	150	4,194.96
		__TCS Total		506.96

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Distributn	HDC	D_TECHCREW	*Supply	(43,680.00)
Distributn	HDC	D_TECHCREW	107	5,744.00
Distributn	HDC	D_TECHCREW	150	42,084.69
		D_TECHCREW Total		4,148.69
Distributn	HDH	__FS	*Supply	(2,080.00)
Distributn	HDH	__FS	107	336.00
Distributn	HDH	__FS	150	1,944.00
		__FS Total		200.00
Distributn	HDH	__TCS	*Supply	(4,160.00)
Distributn	HDH	__TCS	107	608.00
Distributn	HDH	__TCS	150	4,418.59
		__TCS Total		866.59
Distributn	HDH	D_CREW	*Supply	(64,480.00)
Distributn	HDH	D_CREW	107	9,304.00
Distributn	HDH	D_CREW	150	48,632.57
		D_CREW Total		(6,543.43)
Distributn	HDK	__FS	*Supply	(2,080.00)
Distributn	HDK	__FS	107	336.00
Distributn	HDK	__FS	150	1,954.84
		__FS Total		210.84
Distributn	HDK	__TC	*Supply	(2,080.00)
Distributn	HDK	__TC	107	216.00
Distributn	HDK	__TC	150	2,102.00
		__TC Total		238.00
Distributn	HDK	__TCS	*Supply	(4,160.00)
Distributn	HDK	__TCS	107	656.00
Distributn	HDK	__TCS	150	6,603.41
		__TCS Total		3,099.41
Distributn	HDK	D_CREW	*Supply	(43,680.00)
Distributn	HDK	D_CREW	107	6,096.00
Distributn	HDK	D_CREW	150	36,059.78
		D_CREW Total		(1,524.22)
Distributn	HDK	D_INSPE	*Supply	(2,080.00)
Distributn	HDK	D_INSPE	107	344.00
Distributn	HDK	D_INSPE	150	484.00
		D_INSPE Total		(1,252.00)
Distributn	HDK	D_WAREH	*Supply	(2,080.00)
Distributn	HDK	D_WAREH	107	264.00
Distributn	HDK	D_WAREH	150	2,236.01
		D_WAREH Total		420.01
Distributn	HDR	__BUOC	*Supply	(12,480.00)
Distributn	HDR	__BUOC	107	1,720.00
Distributn	HDR	__BUOC	150	11,811.00
		__BUOC Total		1,051.00
Distributn	HDR	__BUTC	150	349.00
		__BUTC Total		349.00
Distributn	HDR	__FS	150	580.50
		__FS Total		580.50

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Distributn	HDR	__TCS	*Supply	(2,080.00)
Distributn	HDR	__TCS	107	256.00
Distributn	HDR	__TCS	150	2,064.00
		__TCS Total		240.00
Distributn	HDR	D_INSPE	*Supply	(4,160.00)
Distributn	HDR	D_INSPE	107	608.00
Distributn	HDR	D_INSPE	150	4,178.98
		D_INSPE Total		626.98
Distributn	HDS	__BUTC	*Supply	(4,160.00)
Distributn	HDS	__BUTC	107	784.00
Distributn	HDS	__BUTC	150	4,076.00
		__BUTC Total		700.00
Distributn	HDS	__TCS	*Supply	(2,080.00)
Distributn	HDS	__TCS	107	336.00
Distributn	HDS	__TCS	150	1,828.00
		__TCS Total		84.00
Distributn	HDS	D_WAREH	*Supply	(8,320.00)
Distributn	HDS	D_WAREH	107	1,160.00
Distributn	HDS	D_WAREH	150	7,636.00
		D_WAREH Total		476.00
Distributn	HDW	__TCS	*Supply	(2,080.00)
Distributn	HDW	__TCS	107	336.00
Distributn	HDW	__TCS	150	3,305.45
		__TCS Total		1,561.45
Distributn	HDW	D_CREW	*Supply	(27,040.00)
Distributn	HDW	D_CREW	107	3,544.00
Distributn	HDW	D_CREW	150	21,949.46
		D_CREW Total		(1,546.54)
Distributn	HDW	D_INSPE	*Supply	(2,080.00)
Distributn	HDW	D_INSPE	107	408.00
Distributn	HDW	D_INSPE	150	715.00
		D_INSPE Total		(957.00)
Distributn	HDW	D_WAREH	*Supply	(2,080.00)
Distributn	HDW	D_WAREH	107	368.00
Distributn	HDW	D_WAREH	150	2,228.00
		D_WAREH Total		516.00
Energy Services	HEA	__E	*Supply	(2,080.00)
Energy Services	HEA	__E	107	232.00
Energy Services	HEA	__E	150	2,266.00
		__E Total		418.00
Energy Services	HEB	__I	*Supply	(4,160.00)
Energy Services	HEB	__I	107	424.00
Energy Services	HEB	__I	150	3,736.00
		__I Total		0.00
Energy Services	HEB	__TC	*Supply	(4,160.00)
Energy Services	HEB	__TC	107	464.00
Energy Services	HEB	__TC	150	3,973.00
		__TC Total		277.00

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Energy Services	HEB	__TCS	*Supply	(2,080.00)
Energy Services	HEB	__TCS	107	232.00
Energy Services	HEB	__TCS	150	1,966.00
		__TCS Total		118.00
Energy Services	HEE	__TC	*Supply	(2,080.00)
Energy Services	HEE	__TC	107	240.00
Energy Services	HEE	__TC	150	1,958.00
		__TC Total		118.00
Energy Services	HES	__TC	*Supply	(8,320.00)
Energy Services	HES	__TC	107	1,088.00
Energy Services	HES	__TC	150	7,910.00
		__TC Total		678.00
Energy Services	HES	__TCS	*Supply	(2,080.00)
Energy Services	HES	__TCS	107	112.00
Energy Services	HES	__TCS	150	1,809.00
		__TCS Total		(159.00)
Engineer	HWA	__BUOC	*Supply	(16,640.00)
Engineer	HWA	__BUOC	107	1,856.04
Engineer	HWA	__BUOC	150	15,183.96
		__BUOC Total		400.00
Engineer	HWA	__E	*Supply	(2,080.00)
Engineer	HWA	__E	107	272.04
Engineer	HWA	__E	150	1,953.97
		__E Total		146.01
Engineer	HWA	__TC	150	88.00
		__TC Total		88.00
Engineer	HWA	__TCS	*Supply	(2,080.00)
Engineer	HWA	__TCS	107	231.96
Engineer	HWA	__TCS	150	1,946.16
		__TCS Total		98.12
Engineer	HWC	__TCS	*Supply	(2,080.00)
Engineer	HWC	__TCS	107	219.96
Engineer	HWC	__TCS	150	2,692.08
		__TCS Total		832.04
Engineer	HWC	W_CD	*Supply	(2,080.00)
Engineer	HWC	W_CD	107	296.04
Engineer	HWC	W_CD	150	2,412.55
		W_CD Total		628.59
Engineer	HWC	W_CP	*Supply	(6,240.00)
Engineer	HWC	W_CP	107	770.04
Engineer	HWC	W_CP	150	6,447.03
		W_CP Total		977.07
Engineer	HWC	W_DP	*Supply	(2,080.00)
Engineer	HWC	W_DP	107	216.00
Engineer	HWC	W_DP	150	2,207.04
		W_DP Total		343.04

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<u>Dept</u>	<u>*RA #</u>	<u>LC RL</u>	<u>*EE #</u>	<u>FY06</u>
Engineer	HWC	W_JCP	*Supply	(6,240.00)
Engineer	HWC	W_JCP	107	600.00
Engineer	HWC	W_JCP	150	6,532.14
		W_JCP Total		892.14
Engineer	HWC	W_PA	*Supply	(6,240.00)
Engineer	HWC	W_PA	107	600.00
Engineer	HWC	W_PA	150	5,167.71
		W_PA Total		(472.29)
Engineer	HWC	W_SCP	*Supply	(6,240.00)
Engineer	HWC	W_SCP	107	1,008.00
Engineer	HWC	W_SCP	150	6,838.62
		W_SCP Total		1,606.62
Engineer	HWI	_I	*Supply	(2,080.00)
Engineer	HWI	_I	107	183.96
Engineer	HWI	_I	150	2,011.92
		_I Total		115.88
Engineer	HWI	_TCS	*Supply	(2,080.00)
Engineer	HWI	_TCS	107	264.00
Engineer	HWI	_TCS	150	1,833.84
		_TCS Total		17.84
Engineer	HWI	W_COMP	*Supply	(12,480.00)
Engineer	HWI	W_COMP	107	1,264.08
Engineer	HWI	W_COMP	150	11,288.08
		W_COMP Total		72.16
Engineer	HWI	W_MAP	*Supply	(6,240.00)
Engineer	HWI	W_MAP	107	552.00
Engineer	HWI	W_MAP	150	5,731.00
		W_MAP Total		43.00
Engineer	HWK	_BUOC	*Supply	(4,160.00)
Engineer	HWK	_BUOC	107	567.96
Engineer	HWK	_BUOC	150	4,044.00
		_BUOC Total		451.96
Engineer	HWK	_TC	150	246.64
		_TC Total		246.64
Engineer	HWK	_TCS	*Supply	(2,080.00)
Engineer	HWK	_TCS	107	344.04
Engineer	HWK	_TCS	150	2,606.44
		_TCS Total		870.48
Engineer	HWK	W_CD	*Supply	(4,160.00)
Engineer	HWK	W_CD	107	608.04
Engineer	HWK	W_CD	150	4,721.98
		W_CD Total		1,170.02
Engineer	HWK	W_CP	*Supply	(4,160.00)
Engineer	HWK	W_CP	107	488.04
Engineer	HWK	W_CP	150	4,968.77
		W_CP Total		1,296.81

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<u>Dept</u>	<u>*RA #</u>	<u>LC RL</u>	<u>*EE #</u>	<u>FY06</u>
Engineer	HWK	W_DP	*Supply	(2,080.00)
Engineer	HWK	W_DP	107	224.04
Engineer	HWK	W_DP	150	2,106.40
		W_DP Total		250.44
Engineer	HWK	W_JCP	*Supply	(4,160.00)
Engineer	HWK	W_JCP	107	249.96
Engineer	HWK	W_JCP	150	5,213.73
		W_JCP Total		1,303.69
Engineer	HWK	W_MAP	150	36.00
		W_MAP Total		36.00
Engineer	HWK	W_PA	*Supply	(4,160.00)
Engineer	HWK	W_PA	107	530.04
Engineer	HWK	W_PA	150	4,113.24
		W_PA Total		483.28
Engineer	HWK	W_SCP	*Supply	(4,160.00)
Engineer	HWK	W_SCP	107	608.04
Engineer	HWK	W_SCP	150	4,015.15
		W_SCP Total		463.19
Engineer	HWS	_I	*Supply	(2,080.00)
Engineer	HWS	_I	107	200.04
Engineer	HWS	_I	150	2,412.34
		_I Total		532.38
Engineer	HWS	_TCS	*Supply	(2,080.00)
Engineer	HWS	_TCS	107	240.00
Engineer	HWS	_TCS	150	3,065.97
		_TCS Total		1,225.97
Engineer	HWS	W_ENG	150	180.00
		W_ENG Total		180.00
Engineer	HWS	W_MAP	150	53.28
		W_MAP Total		53.28
Engineer	HWS	W_RH	*Supply	(2,080.00)
Engineer	HWS	W_RH	107	240.00
Engineer	HWS	W_RH	150	2,608.63
		W_RH Total		768.63
Engineer	HWS	W_TT	*Supply	(2,080.00)
Engineer	HWS	W_TT	107	279.96
Engineer	HWS	W_TT	150	2,313.67
		W_TT Total		513.63
Engineer	HWW	W_CP	*Supply	(2,080.00)
Engineer	HWW	W_CP	107	174.96
Engineer	HWW	W_CP	150	1,986.96
		W_CP Total		81.92
Engineer	HWW	W_JCP	*Supply	(2,080.00)
Engineer	HWW	W_JCP	107	174.96
Engineer	HWW	W_JCP	150	1,986.96
		W_JCP Total		81.92

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<u>Dept</u>	<u>*RA #</u>	<u>LC RL</u>	<u>*EE #</u>	<u>FY06</u>
Engineer	HWX	__FS	*Supply	(2,080.00)
Engineer	HWX	__FS	107	304.08
Engineer	HWX	__FS	150	2,780.44
		__FS Total		1,004.52
Engineer	HWX	D_TECHCREW	150	640.00
		D_TECHCREW Total		640.00
Engineer	HWX	W_DP	150	163.00
		W_DP Total		163.00
Engineer	HWX	W_ENG	*Supply	(10,400.00)
Engineer	HWX	W_ENG	107	1,215.96
Engineer	HWX	W_ENG	150	15,019.14
		W_ENG Total		5,835.10
Engineer	HWX	W_PA	150	240.00
		W_PA Total		240.00
Engineer	HWX	W_SCD	*Supply	(8,320.00)
Engineer	HWX	W_SCD	107	1,281.96
Engineer	HWX	W_SCD	150	10,086.14
		W_SCD Total		3,048.10
Generation	HGA	__BUOC	*Supply	(2,080.00)
Generation	HGA	__BUOC	107	357.00
Generation	HGA	__BUOC	150	1,883.00
		__BUOC Total		160.00
Generation	HGA	__BUTC	150	320.00
		__BUTC Total		320.00
Generation	HGA	__E	*Supply	(2,080.00)
Generation	HGA	__E	107	237.00
Generation	HGA	__E	150	1,711.00
		__E Total		(132.00)
Generation	HGA	__FS	*Supply	(4,160.00)
Generation	HGA	__FS	107	514.00
Generation	HGA	__FS	150	4,142.00
		__FS Total		496.00
Generation	HGA	__TC	*Supply	(6,240.00)
Generation	HGA	__TC	107	751.00
Generation	HGA	__TC	150	6,057.00
		__TC Total		568.00
Generation	HGA	__TCS	*Supply	(14,560.00)
Generation	HGA	__TCS	107	2,299.00
Generation	HGA	__TCS	150	16,671.00
		__TCS Total		4,410.00
Generation	HGC	__BUTC	*Supply	(12,480.00)
Generation	HGC	__BUTC	107	1,842.00
Generation	HGC	__BUTC	150	15,018.00
		__BUTC Total		4,380.00
Generation	HGC	__TCS	*Supply	(4,160.00)
Generation	HGC	__TCS	107	654.00
Generation	HGC	__TCS	150	4,966.00
		__TCS Total		1,460.00

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<u>Dept</u>	<u>*RA #</u>	<u>LC RL</u>	<u>*EE #</u>	<u>FY06</u>
Generation	HGH	__ BUTC	*Supply	(49,920.00)
Generation	HGH	__ BUTC	107	8,368.00
Generation	HGH	__ BUTC	108	600.00
Generation	HGH	__ BUTC	150	56,532.00
		__ BUTC Total		15,580.00
Generation	HGK	__ BUTC	*Supply	(6,240.00)
Generation	HGK	__ BUTC	107	1,296.00
Generation	HGK	__ BUTC	150	7,269.00
		__ BUTC Total		2,325.00
Generation	HGK	__ TCS	*Supply	(2,080.00)
Generation	HGK	__ TCS	107	392.00
Generation	HGK	__ TCS	150	2,463.00
		__ TCS Total		775.00
Generation	HGK	G_ELEAC	*Supply	(4,160.00)
Generation	HGK	G_ELEAC	107	784.00
Generation	HGK	G_ELEAC	150	4,926.00
		G_ELEAC Total		1,550.00
Generation	HGK	G_MECHN	*Supply	(4,160.00)
Generation	HGK	G_MECHN	107	784.00
Generation	HGK	G_MECHN	150	4,830.00
		G_MECHN Total		1,454.00
Generation	HGM	__ BUTC	*Supply	(14,560.00)
Generation	HGM	__ BUTC	107	2,054.00
Generation	HGM	__ BUTC	108	175.00
Generation	HGM	__ BUTC	150	16,181.00
		__ BUTC Total		3,850.00
Generation	HGM	__ TCS	*Supply	(6,240.00)
Generation	HGM	__ TCS	107	966.00
Generation	HGM	__ TCS	108	75.00
Generation	HGM	__ TCS	150	6,849.00
		__ TCS Total		1,650.00
Generation	HGM	G_ELEAC	*Supply	(6,240.00)
Generation	HGM	G_ELEAC	107	926.00
Generation	HGM	G_ELEAC	108	75.00
Generation	HGM	G_ELEAC	150	6,889.00
		G_ELEAC Total		1,650.00
Generation	HGM	G_MECHN	*Supply	(10,400.00)
Generation	HGM	G_MECHN	107	1,250.00
Generation	HGM	G_MECHN	108	125.00
Generation	HGM	G_MECHN	150	11,815.00
		G_MECHN Total		2,790.00
Generation	HGP	__ BUTC	*Supply	(20,800.00)
Generation	HGP	__ BUTC	107	3,300.00
Generation	HGP	__ BUTC	150	24,180.00
		__ BUTC Total		6,680.00

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<u>Dept</u>	<u>*RA #</u>	<u>LC RL</u>	<u>*EE #</u>	<u>FY06</u>
Generation	HGT	__FS	*Supply	(2,080.00)
Generation	HGT	__FS	107	332.00
Generation	HGT	__FS	150	1,989.00
		__FS Total		241.00
Generation	HGT	__TC	*Supply	(8,320.00)
Generation	HGT	__TC	107	1,048.00
Generation	HGT	__TC	150	7,584.00
		__TC Total		312.00
Generation	HGW	__BUTC	*Supply	(16,640.00)
Generation	HGW	__BUTC	107	1,000.00
Generation	HGW	__BUTC	150	20,344.00
		__BUTC Total		4,704.00
Generation	HGX	__BUTC	*Supply	(4,160.00)
Generation	HGX	__BUTC	107	764.00
Generation	HGX	__BUTC	150	4,616.00
		__BUTC Total		1,220.00
Generation	HGX	__TCS	*Supply	(2,080.00)
Generation	HGX	__TCS	107	382.00
Generation	HGX	__TCS	150	2,428.00
		__TCS Total		730.00
Generation	HGX	G_ELEAC	*Supply	(2,080.00)
Generation	HGX	G_ELEAC	107	604.00
Generation	HGX	G_ELEAC	150	5,016.00
		G_ELEAC Total		3,540.00
Generation	HGX	G_MECHN	*Supply	(8,320.00)
Generation	HGX	G_MECHN	107	946.00
Generation	HGX	G_MECHN	150	7,964.00
		G_MECHN Total		590.00
President	H9P	__EXEC	*Supply	(2,080.00)
President	H9P	__EXEC	107	112.00
President	H9P	__EXEC	150	2,448.00
		__EXEC Total		480.00
President	H9P	__I	*Supply	(2,080.00)
President	H9P	__I	107	208.00
President	H9P	__I	150	1,968.00
		__I Total		96.00
		Grand Total		107,014.71

CA-IR-116

Ref: T-9, pages 84-86, & HELCO-WP-918 (Standard Labor Rates).

HELCO-WP-918 adjusts 2004 historical labor rates, by labor class, in order to restate overtime included in the standard labor rates consistent with 2006 budget year conditions. Using the BUOC labor class for illustration purposes, please provide the following

- a. Please confirm that the hours and payroll dollars on the right side of HELCO-WP-918 represent actual 2004 information. If this cannot be confirmed, please explain.
- b. The 2004 productive amount (\$1,913,238), productive hours (79,370), overtime amount (\$178,276) and overtime hours (4,345) represent input values in the spreadsheet file ("918WP.xls") supporting HELCO-WP-918. Please provide the following:
 1. Please identify the data source(s) for these input dollars and hours.
 2. If the response to part (b)(1) of this information request identifies departmental resource leveling reports supporting the 2004 values, please provide a copy of all resource leveling reports for each Department and clearly show how that data was used to quantify the 2004 input values on HELCO-WP-918.
 3. If the response to part (b)(1) of this information request identifies data sources other than departmental resource leveling reports, please provide a copy of the identified source documents for each Department and clearly show how that data was used to quantify the 2004 input values on HELCO-WP-918.

HELCO Response:

- a. The columns to the right side of HELCO-WP-918 (columns A, B, C & D) represent actual 2004 information. The other columns to the right side of HELCO-WP-918 are calculated based on columns A – D.
- b.
 1. The data source for the input dollars and hours are from the calendar year 2004 payroll information, as was discussed in HELCO's response to CA-IR-111.
 2. Not applicable.
 3. The information requested is attached on pages 2 – 7.

LAB_COST CLASS	TRAN CODE	TNAME A	AMT	Hours	OT adj \$	OT adj hrs	prod hrs
BUOC	001	REGULAR EARNINGS	\$ 1,701,123	75,038			75,038
BUOC	004	EXTRA STRAIGHT TIME	\$ 631	34	\$ 631	34	34
BUOC	008	Pre/Post Roster OT @ 1.5	\$ 77,650	2,177	\$ 77,650	2,177	2,177
BUOC	009	Pre/Post Roster OT @ 2.0	\$ 10,620	221	\$ 10,620	221	221
BUOC	014	Extra Straight-Merit Exempt	\$ 322	12	\$ 322	12	
BUOC	015	Call-out OT @ 1.5	\$ 18,274	518	\$ 18,274	518	518
BUOC	016	Call-out OT @ 2.0x	\$ 20,478	439	\$ 20,478	439	439
BUOC	017	Scheduled OT @ 1.5x	\$ 25,355	755	\$ 25,355	755	755
BUOC	018	Scheduled OT @ 2.0x	\$ 9,615	189	\$ 9,615	189	189
BUOC	021	Penalty @.5X	\$ 4,365	373	\$ 4,365		
BUOC	023	Penalty @ 1.0X	\$ 14	1	\$ 14		
BUOC	024	C/O Meal Time Pen @ 1.5	\$ 1,681	47	\$ 1,681		
BUOC	025	C/O Meal Time Pen @ 2.0	\$ 1,241	27	\$ 1,241		
BUOC	121	Meals	\$ 6,036	503	\$ 6,036		
BUOC	125	Higher Duty - Difference	\$ 27,672	12,076			
BUOC	160	Adjustment-HEIRS	\$ 4	3			
BUOC	202	Shift 2- Afternoon	\$ 1,920	2,252			
BUOC	203	Shift 3-Midnight	\$ 2,239	2,236			
BUOC	204	Shift 4-Sunday Day	\$ 466	408			
BUOC	205	Shift 5-Sunday Afternoon	\$ 718	360			
BUOC	206	Shift 6-Sunday Night	\$ 819	382			
BUOC	212	Shift 2 @ OT	\$ 461	360	\$ 461		
BUOC	213	Shift 3 @ OT	\$ 602	400	\$ 602		
BUOC	214	Shift 4 @ OT	\$ 80	46	\$ 80		
BUOC	215	Shift 5 @ OT	\$ 143	48	\$ 143		
BUOC	216	Shift 6 @ OT	\$ 141	44	\$ 141		
BUOC	222	Shift 2 @ DT	\$ 123	72	\$ 123		
BUOC	223	Shift 3 @ DT	\$ 130	65	\$ 130		
BUOC	224	Shift 4 @ DT	\$ 37	16	\$ 37		
BUOC	225	Shift 5 @ DT	\$ 143	36	\$ 143		
BUOC	226	Shift 6 @ DT	\$ 49	11	\$ 49		
BUOC	232	Shift 2 @.5X	\$ 20	47	\$ 20		
BUOC	233	Shift 3 @.5X	\$ 43	85	\$ 43		
BUOC	234	Shift 4 @.5X	\$ 5	9	\$ 5		
BUOC	235	Shift 5 @.5X	\$ 5	5	\$ 5		
BUOC	236	Shift 6 @.5X	\$ 13	12	\$ 13		
Total			\$ 1,913,238	99,305	\$ 178,276	4,345	79,370
BUTC	001	REGULAR EARNINGS	\$ 2,112,618	72,904			72,904
BUTC	004	EXTRA STRAIGHT TIME	\$ 325	11	\$ 325	11	11
BUTC	008	Pre/Post Roster OT @ 1.5	\$ 235,497	5,312	\$ 235,497	5,312	5,312
BUTC	009	Pre/Post Roster OT @ 2.0	\$ 139,118	2,401	\$ 139,118	2,401	2,401
BUTC	014	Extra Straight-Merit Exempt	\$ 757	28	\$ 757	28	
BUTC	015	Call-out OT @ 1.5	\$ 359,472	8,359	\$ 359,472	8,359	8,359
BUTC	016	Call-out OT @ 2.0x	\$ 529,746	9,253	\$ 529,746	9,253	9,253
BUTC	017	Scheduled OT @ 1.5x	\$ 198,627	4,496	\$ 198,627	4,496	4,496
BUTC	018	Scheduled OT @ 2.0x	\$ 39,195	639	\$ 39,195	639	639
BUTC	020	Cancel OT Pen 2hr EST	\$ 571	20	\$ 571		
BUTC	021	Penalty @.5X	\$ 19,901	1,394	\$ 19,901		
BUTC	023	Penalty @ 1.0X	\$ 2,470	82	\$ 2,470		
BUTC	024	C/O Meal Time Pen @ 1.5	\$ 12,535	259	\$ 12,535		
BUTC	025	C/O Meal Time Pen @ 2.0	\$ 4,737	76	\$ 4,737		
BUTC	121	Meals	\$ 40,272	3,356	\$ 40,272		
BUTC	125	Higher Duty - Difference	\$ 26,595	7,418			
BUTC	160	Adjustment-HEIRS	\$ 18	32			
BUTC	202	Shift 2- Afternoon	\$ 14,780	17,337			
BUTC	203	Shift 3-Midnight	\$ 12,837	12,823			
BUTC	204	Shift 4-Sunday Day	\$ 2,907	2,544			
BUTC	205	Shift 5-Sunday Afternoon	\$ 5,498	2,756			
BUTC	206	Shift 6-Sunday Night	\$ 4,852	2,264			

LAB_COST CLASS	TRAN CODE	TNAME_A	AMT	Hours	OT adj \$	OT adj hrs	prod hrs
BUTC	212	Shift 2 @ OT	\$ 6,201	4,852	\$ 6,201		
BUTC	213	Shift 3 @ OT	\$ 3,731	2,485	\$ 3,731		
BUTC	214	Shift 4 @ OT	\$ 460	269	\$ 460		
BUTC	215	Shift 5 @ OT	\$ 974	326	\$ 974		
BUTC	216	Shift 6 @ OT	\$ 607	189	\$ 607		
BUTC	222	Shift 2 @ DT	\$ 4,292	2,521	\$ 4,292		
BUTC	223	Shift 3 @ DT	\$ 1,907	953	\$ 1,907		
BUTC	224	Shift 4 @ DT	\$ 3,888	1,704	\$ 3,888		
BUTC	225	Shift 5 @ DT	\$ 6,163	1,548	\$ 6,163		
BUTC	226	Shift 6 @ DT	\$ 1,031	241	\$ 1,031		
BUTC	232	Shift 2 @.5X	\$ 117	275	\$ 117		
BUTC	233	Shift 3 @.5X	\$ 388	776	\$ 388		
BUTC	234	Shift 4 @.5X	\$ 4	7	\$ 4		
BUTC	235	Shift 5 @.5X	\$ 57	57	\$ 57		
BUTC	236	Shift 6 @.5X	\$ 37	34	\$ 37		
Total			\$ 3,793,185	169,997	\$ 1,613,080	30,498	103,373
CD-CE	001	REGULAR EARNINGS	\$ 117,057	3,476			3,476
Total			\$ 117,057	3,476	\$ -	-	3,476
COMP	001	REGULAR EARNINGS	\$ 81,821	3,245			3,245
COMP	004	EXTRA STRAIGHT TIME	\$ 13	1	\$ 13	1	1
COMP	005	1.5 OT for Merit Non Exempt	\$ 5,687	152	\$ 5,687	152	152
Total			\$ 87,521	3,397	\$ 5,700	152	3,397
CP-CE	001	REGULAR EARNINGS	\$ 253,419	8,934			8,934
CP-CE	008	Pre/Post Roster OT @ 1.5	\$ 4,055	95	\$ 4,055	95	95
CP-CE	017	Scheduled OT @ 1.5x	\$ 170	4	\$ 170	4	4
CP-CE	024	C/O Meal Time Pen @ 1.5	\$ 318	8	\$ 318		
CP-CE	121	Meals	\$ 204	17	\$ 204		
CP-CE	125	Higher Duty - Difference	\$ 1,095	737			
Total			\$ 259,261	9,794	\$ 4,747	99	9,033
CREW	001	REGULAR EARNINGS	\$ 2,490,831	87,106			87,106
CREW	004	EXTRA STRAIGHT TIME	\$ 8,652	300	\$ 8,652	300	300
CREW	008	Pre/Post Roster OT @ 1.5	\$ 335,161	7,798	\$ 335,161	7,798	7,798
CREW	009	Pre/Post Roster OT @ 2.0	\$ 126,583	2,222	\$ 126,583	2,222	2,222
CREW	014	Extra Straight-Merit Exempt	\$ 212	7	\$ 212	7	7
CREW	015	Call-out OT @ 1.5	\$ 115,454	2,560	\$ 115,454	2,560	2,560
CREW	016	Call-out OT @ 2.0x	\$ 303,695	5,134	\$ 303,695	5,134	5,134
CREW	017	Scheduled OT @ 1.5x	\$ 495,123	11,785	\$ 495,123	11,785	11,785
CREW	018	Scheduled OT @ 2.0x	\$ 124,030	2,241	\$ 124,030	2,241	2,241
CREW	021	Penalty @.5X	\$ 80,177	5,592	\$ 80,177		
CREW	023	Penalty @ 1.0X	\$ 55,048	1,868	\$ 55,048		
CREW	024	C/O Meal Time Pen @ 1.5	\$ 26,493	627	\$ 26,493		
CREW	025	C/O Meal Time Pen @ 2.0	\$ 84,242	1,456	\$ 84,242		
CREW	101	Differential - Helicopter	\$ 24	2			
CREW	106	Differential-Standby	\$ 200	267			
CREW	110	O/T Height 1.5	\$ 330	26	\$ 330		
CREW	115	Leading Man	\$ 4	19			
CREW	121	Meals	\$ 60,940	5,078	\$ 60,940		
CREW	125	Higher Duty - Difference	\$ 100,804	38,495			
CREW	160	Adjustment-HEIRS	\$ 2	6			
CREW	202	Shift 2- Afternoon	\$ 3,808	4,468			
CREW	204	Shift 4-Sunday Day	\$ 841	736			
CREW	205	Shift 5-Sunday Afternoon	\$ 1,516	760			
CREW	212	Shift 2 @ OT	\$ 884	691	\$ 884		
CREW	213	Shift 3 @ OT	\$ 318	212	\$ 318		
CREW	214	Shift 4 @ OT	\$ 194	113	\$ 194		
CREW	215	Shift 5 @ OT	\$ 312	104	\$ 312		
CREW	216	Shift 6 @ OT	\$ 250	78	\$ 250		
CREW	222	Shift 2 @ DT	\$ 380	223	\$ 380		
CREW	223	Shift 3 @ DT	\$ 32	16	\$ 32		

LAB_COST CLASS	TRAN CODE	TNAME A	AMT	Hours	OT adj \$	OT adj hrs	prod hrs
CREW	224	Shift 4 @ DT	\$ 110	48	\$ 110		
CREW	225	Shift 5 @ DT	\$ 88	22	\$ 88		
CREW	232	Shift 2 @.5X	\$ 92	216	\$ 92		
CREW	233	Shift 3 @.5X	\$ 84	169	\$ 84		
CREW	234	Shift 4 @.5X	\$ 2	4	\$ 2		
CREW	235	Shift 5 @.5X	\$ 37	37	\$ 37		
CREW	236	Shift 6 @.5X	\$ 82	77	\$ 82		
Total			\$ 4,417,036	180,563	\$ 1,819,006	32,048	119,147
CSM	001	REGULAR EARNINGS	\$ 507,872	22,264			22,264
CSM	004	EXTRA STRAIGHT TIME	\$ 661	27	\$ 661	27	27
CSM	008	Pre/Post Roster OT @ 1.5	\$ 13,434	363	\$ 13,434	363	363
CSM	015	Call-out OT @ 1.5	\$ 591	17	\$ 591	17	17
CSM	016	Call-out OT @ 2.0x	\$ 90	2	\$ 90	2	2
CSM	017	Scheduled OT @ 1.5x	\$ 30,756	933	\$ 30,756	933	933
CSM	018	Scheduled OT @ 2.0x	\$ 15,672	347	\$ 15,672	347	347
CSM	021	Penalty @.5X	\$ 2,665	215	\$ 2,665		
CSM	023	Penalty @ 1.0X	\$ 134	5	\$ 134		
CSM	024	C/O Meal Time Pen @ 1.5	\$ 1,205	35	\$ 1,205		
CSM	025	C/O Meal Time Pen @ 2.0	\$ 155	4	\$ 155		
CSM	121	Meals	\$ 1,368	114	\$ 1,368		
CSM	125	Higher Duty - Difference	\$ 8,244	4,867			
CSM Total			\$ 582,847	29,192	\$ 66,731	1,688	23,952
DP-ED	001	REGULAR EARNINGS	\$ 92,403	3,399			3,399
DP-ED	008	Pre/Post Roster OT @ 1.5	\$ 29	1	\$ 29	1	1
DP-ED	125	Higher Duty - Difference	\$ 102	160			
Total			\$ 92,534	3,560	\$ 29	1	3,400
E	001	REGULAR EARNINGS	\$ 154,849	3,647			3,647
E	012	Mexempt	\$ -	-	\$ -	-	-
E	131	value)	\$ -	213	\$ -	213	-
E Total			\$ 154,849	3,860	\$ -	213	3,647
ELEAC	001	REGULAR EARNINGS	\$ 326,035	10,855			10,855
ELEAC	004	EXTRA STRAIGHT TIME	\$ 95	3	\$ 95	3	3
ELEAC	008	Pre/Post Roster OT @ 1.5	\$ 74,533	1,667	\$ 74,533	1,667	1,667
ELEAC	009	Pre/Post Roster OT @ 2.0	\$ 6,338	102	\$ 6,338	102	102
ELEAC	014	Extra Straight-Merit Exempt	\$ 263	8	\$ 263	8	
ELEAC	015	Call-out OT @ 1.5	\$ 4,172	91	\$ 4,172	91	91
ELEAC	016	Call-out OT @ 2.0x	\$ 9,078	153	\$ 9,078	153	153
ELEAC	017	Scheduled OT @ 1.5x	\$ 56,931	1,257	\$ 56,931	1,257	1,257
ELEAC	018	Scheduled OT @ 2.0x	\$ 31,710	528	\$ 31,710	528	528
ELEAC	020	Cancel OT Pen 2hr EST	\$ 242	8	\$ 242		
ELEAC	021	Penalty @.5X	\$ 630	42	\$ 630		
ELEAC	024	C/O Meal Time Pen @ 1.5	\$ 11,234	254	\$ 11,234		
ELEAC	025	C/O Meal Time Pen @ 2.0	\$ 5,787	97	\$ 5,787		
ELEAC	121	Meals	\$ 9,384	782	\$ 9,384		
ELEAC	125	Higher Duty - Difference	\$ 16,749	6,752			
Total			\$ 553,179	22,597	\$ 210,396	3,809	14,656
ENG	001	REGULAR EARNINGS	\$ 210,454	6,650			6,650
ENG	014	Extra Straight-Merit Exempt	\$ 958	32	\$ 958	32	
ENG	131	value)	\$ -	96	\$ -	96	
ENG Total			\$ 211,412	6,778	\$ 958	128	6,650
E-V	001	REGULAR EARNINGS	\$ 388,001	7,382			7,382
E-V	131	value)	\$ -	374	\$ -	374	
E-V Total			\$ 388,001	7,756	\$ -	374	7,382
EXEC	001	REGULAR EARNINGS	\$ 181,045	1,976			1,976
Total			\$ 181,045	1,976	\$ -	-	1,976
FS	001	REGULAR EARNINGS	\$ 493,126	11,274			11,274
FS	004	EXTRA STRAIGHT TIME	\$ 23	1	\$ 23	1	1
FS	012	Mexempt	\$ 91	2	\$ 91	2	
FS	014	Extra Straight-Merit Exempt	\$ 4,125	99	\$ 4,125	99	

LAB_COST_CLASS	TRAN_CODE	TNAME_A	AMT	Hours	OT adj \$	OT adj hrs	prod hrs
FS	021	Penalty @.5X	\$ 673	33	\$ 673		
FS	131	value)	\$ -	147	\$ -	147	
FS Total			\$ 498,038	11,555	\$ 4,912	248	11,275
I	001	REGULAR EARNINGS	\$ 150,410	7,306			7,306
I	005	1.5 OT for Merit Non Exempt	\$ 9,403	298	\$ 9,403	298	298
I	160	Adjustment-HEIRS	\$ 8	1			
I Total			\$ 159,821	7,605	\$ 9,403	298	7,604
INSPE	001	REGULAR EARNINGS	\$ 122,566	3,964			3,964
INSPE	004	EXTRA STRAIGHT TIME	\$ 45	2	\$ 45	2	2
INSPE	008	Pre/Post Roster OT @ 1.5	\$ 22,147	479	\$ 22,147	479	479
INSPE	009	Pre/Post Roster OT @ 2.0	\$ 695	11	\$ 695	11	11
INSPE	015	Call-out OT @ 1.5	\$ 643	14	\$ 643	14	14
INSPE	016	Call-out OT @ 2.0x	\$ 1,330	22	\$ 1,330	22	22
INSPE	017	Scheduled OT @ 1.5x	\$ 471	10	\$ 471	10	10
INSPE	018	Scheduled OT @ 2.0x	\$ 31	1	\$ 31	1	1
INSPE	021	Penalty @.5X	\$ 174	11	\$ 174		
INSPE	023	Penalty @ 1.0X	\$ 241	8	\$ 241		
INSPE	024	C/O Meal Time Pen @ 1.5	\$ 1,715	37	\$ 1,715		
INSPE	025	C/O Meal Time Pen @ 2.0	\$ 276	5	\$ 276		
INSPE	101	Differential - Helicopter	\$ 348	29			
INSPE	121	Meals	\$ 1,344	112	\$ 1,344		
INSPE	125	Higher Duty - Difference	\$ -	332			
Total			\$ 152,026	5,036	\$ 29,112	539	4,503
JCP-CE	001	REGULAR EARNINGS	\$ 205,717	8,713			8,713
JCP-CE	008	Pre/Post Roster OT @ 1.5	\$ 6,508	180	\$ 6,508	180	180
JCP-CE	015	Call-out OT @ 1.5	\$ 66	2	\$ 66	2	2
JCP-CE	024	C/O Meal Time Pen @ 1.5	\$ 200	6	\$ 200		
JCP-CE	121	Meals	\$ 132	11	\$ 132		
JCP-CE	125	Higher Duty - Difference	\$ 438	537			
Total			\$ 213,060	9,448	\$ 6,906	182	8,895
MECHN	001	REGULAR EARNINGS	\$ 627,729	20,762			20,762
MECHN	004	EXTRA STRAIGHT TIME	\$ 739	23	\$ 739	23	23
MECHN	008	Pre/Post Roster OT @ 1.5	\$ 109,214	2,517	\$ 109,214	2,517	2,517
MECHN	009	Pre/Post Roster OT @ 2.0	\$ 6,941	125	\$ 6,941	125	125
MECHN	014	Extra Straight-Merit Exempt	\$ 479	15	\$ 479	15	
MECHN	015	Call-out OT @ 1.5	\$ 4,736	107	\$ 4,736	107	107
MECHN	016	Call-out OT @ 2.0x	\$ 13,611	236	\$ 13,611	236	236
MECHN	017	Scheduled OT @ 1.5x	\$ 129,847	2,870	\$ 129,847	2,870	2,870
MECHN	018	Scheduled OT @ 2.0x	\$ 65,863	1,117	\$ 65,863	1,117	1,117
MECHN	020	Cancel OT Pen 2hr EST	\$ 559	18	\$ 559		
MECHN	021	Penalty @.5X	\$ 2,148	141	\$ 2,148		
MECHN	023	Penalty @ 1.0X	\$ 379	13	\$ 379		
MECHN	024	C/O Meal Time Pen @ 1.5	\$ 8,693	212	\$ 8,693		
MECHN	025	C/O Meal Time Pen @ 2.0	\$ 8,562	160	\$ 8,562		
MECHN	121	Meals	\$ 14,232	1,186	\$ 14,232		
MECHN	125	Higher Duty - Difference	\$ 39,123	12,187			
MECHN	212	Shift 2 @ OT	\$ 1	1	\$ 1		
Total			\$ 1,032,857	41,688	\$ 366,006	7,009	27,756
PA-CE	001	REGULAR EARNINGS	\$ 120,295	6,087			6,087
PA-CE	008	Pre/Post Roster OT @ 1.5	\$ 5,770	189	\$ 5,770	189	189
PA-CE	017	Scheduled OT @ 1.5x	\$ 247	8	\$ 247	8	8
PA-CE	018	Scheduled OT @ 2.0x	\$ 41	1	\$ 41	1	1
PA-CE	021	Penalty @.5X	\$ 41	4	\$ 41		
PA-CE	024	C/O Meal Time Pen @ 1.5	\$ 245	8	\$ 245		
PA-CE	121	Meals	\$ 192	16	\$ 192		
PA-CE	125	Higher Duty - Difference	\$ 3,701	1,361			
Total			\$ 130,532	7,674	\$ 6,535	198	6,285
POLICE	095	Police Pay	\$ 15,323	671			
POLICE	096	Police OT - HELCO	\$ 587	16			

LAB_COST CLASS	TRAN CODE	TNAME_A	AMT	Hours	OT adj \$	OT adj hrs	prod hrs
POLICE	118	Police Escort	\$ 320	32			
Total			\$ 16,230	719	\$ -	-	-
RH-ED	001	REGULAR EARNINGS	\$ 40,600	1,801			1,801
RH-ED	008	Pre/Post Roster OT @ 1.5	\$ 4,309	128	\$ 4,309	128	128
RH-ED	125	Higher Duty - Difference	\$ 70	18			
Total			\$ 44,979	1,947	\$ 4,309	128	1,929
SCD	001	REGULAR EARNINGS	\$ 105,985	3,593			3,593
SCD	008	Pre/Post Roster OT @ 1.5	\$ 2,227	50	\$ 2,227	50	50
SCD	021	Penalty @.5X	\$ 46	3	\$ 46		
SCD Total			\$ 108,258	3,646	\$ 2,273	50	3,643
SCD-ED	001	REGULAR EARNINGS	\$ 59,481	1,812			1,812
SCD-ED	008	Pre/Post Roster OT @ 1.5	\$ 1,677	34	\$ 1,677	34	34
Total			\$ 61,158	1,846	\$ 1,677	34	1,846
SCP-CE	001	REGULAR EARNINGS	\$ 287,759	8,881			8,881
SCP-CE	008	Pre/Post Roster OT @ 1.5	\$ 2,157	45	\$ 2,157	45	45
SCP-CE	009	Pre/Post Roster OT @ 2.0	\$ 98	2	\$ 98	2	2
SCP-CE	017	Scheduled OT @ 1.5x	\$ 1,197	24	\$ 1,197	24	24
SCP-CE	021	Penalty @.5X	\$ 24	2	\$ 24		
SCP-CE	024	C/O Meal Time Pen @ 1.5	\$ 23	1	\$ 23		
SCP-CE	025	C/O Meal Time Pen @ 2.0	\$ 129	2	\$ 129		
SCP-CE	121	Meals	\$ 96	8	\$ 96		
SCP-CE	125	Higher Duty - Difference	\$ 640	282			
Total			\$ 292,124	9,245	\$ 3,725	70	8,951
TC	001	REGULAR EARNINGS	\$ 1,478,585	49,493			49,493
TC	004	EXTRA STRAIGHT TIME	\$ 14	1	\$ 14	1	1
TC	012	Mexempt	\$ 7,645	237	\$ 7,645	237	
TC	014	Extra Straight-Merit Exempt	\$ 12,226	399	\$ 12,226	399	
TC	131	value)	\$ -	1,547	\$ -	1,547	
TC	160	Adjustment-HEIRS	\$ 4	1			
TC Total			\$ 1,498,475	51,678	\$ 19,885	2,184	49,493
TCS	001	REGULAR EARNINGS	\$ 1,748,137	50,151			50,151
TCS	004	EXTRA STRAIGHT TIME	\$ 151,249	4,297	\$ 151,249	4,297	4,297
TCS	012	Mexempt	\$ 2,787	82	\$ 2,787	82	
TCS	014	Extra Straight-Merit Exempt	\$ 104,550	2,891	\$ 104,550	2,891	
TCS	021	Penalty @.5X	\$ 1,628	90	\$ 1,628		
TCS	131	value)	\$ -	2,196	\$ -	2,196	
TCS	160	Adjustment-HEIRS	\$ 12	7			
TCS	202	Shift 2- Afternoon	\$ 2,406	2,824			
TCS	203	Shift 3-Midnight	\$ 2,621	2,618			
TCS	204	Shift 4-Sunday Day	\$ 613	537			
TCS	205	Shift 5-Sunday Afternoon	\$ 876	439			
TCS	206	Shift 6-Sunday Night	\$ 913	426			
TCS Total			\$ 2,015,791	66,555	\$ 260,213	9,465	54,447
TECREW	001	REGULAR EARNINGS	\$ 769,191	25,718			25,718
TECREW	004	EXTRA STRAIGHT TIME	\$ 361	12	\$ 361	12	12
TECREW	008	Pre/Post Roster OT @ 1.5	\$ 114,865	2,567	\$ 114,865	2,567	2,567
TECREW	009	Pre/Post Roster OT @ 2.0	\$ 10,194	175	\$ 10,194	175	175
TECREW	014	Extra Straight-Merit Exempt	\$ 180	6	\$ 180	6	
TECREW	015	Call-out OT @ 1.5	\$ 3,931	88	\$ 3,931	88	88
TECREW	016	Call-out OT @ 2.0x	\$ 6,543	109	\$ 6,543	109	109
TECREW	017	Scheduled OT @ 1.5x	\$ 38,982	854	\$ 38,982	854	854
TECREW	018	Scheduled OT @ 2.0x	\$ 5,811	94	\$ 5,811	94	94
TECREW	020	Cancel OT Pen 2hr EST	\$ 66	2	\$ 66		
TECREW	021	Penalty @.5X	\$ 3,255	226	\$ 3,255		
TECREW	023	Penalty @ 1.0X	\$ 949	32	\$ 949		
TECREW	024	C/O Meal Time Pen @ 1.5	\$ 11,839	263	\$ 11,839		
TECREW	025	C/O Meal Time Pen @ 2.0	\$ 5,516	94	\$ 5,516		
TECREW	101	Differential - Helicopter	\$ 24	2			
TECREW	110	O/T Height 1.5	\$ 362	24	\$ 362		

LAB COST CLASS	TRAN CODE	TNAME A	AMT	Hours	OT adj \$	OT adj hrs	prod hrs
TECREW	111	O/T Height 2	\$ 150	5	\$ 150		
TECREW	115	Leading Man	\$ 29	144			
TECREW	121	Meals	\$ 10,644	887	\$ 10,644		
TECREW	125	Higher Duty - Difference	\$ 9,565	3,544			
Total			\$ 992,458	34,844	\$ 213,648	3,905	29,617
TT-ED	001	REGULAR EARNINGS	\$ 53,390	1,830			1,830
TT-ED	008	Pre/Post Roster OT @ 1.5	\$ 394	9	\$ 394	9	9
TT-ED	014	Extra Straight-Merit Exempt	\$ 385	12	\$ 385	12	
TT-ED	125	Higher Duty - Difference	\$ 5,823	2,053			
Total			\$ 59,993	3,904	\$ 779	21	1,839
WAREH	001	REGULAR EARNINGS	\$ 171,469	7,172			7,172
WAREH	008	Pre/Post Roster OT @ 1.5	\$ 16,665	461	\$ 16,665	461	461
WAREH	009	Pre/Post Roster OT @ 2.0	\$ 1,046	22	\$ 1,046	22	22
WAREH	014	Extra Straight-Merit Exempt	\$ 230	10	\$ 230	10	
WAREH	015	Call-out OT @ 1.5	\$ 2,511	69	\$ 2,511	69	69
WAREH	016	Call-out OT @ 2.0x	\$ 6,820	141	\$ 6,820	141	141
WAREH	017	Scheduled OT @ 1.5x	\$ 22,696	631	\$ 22,696	631	631
WAREH	018	Scheduled OT @ 2.0x	\$ 4,044	83	\$ 4,044	83	83
WAREH	021	Penalty @.5X	\$ 647	55	\$ 647		
WAREH	023	Penalty @ 1.0X	\$ 293	12	\$ 293		
WAREH	024	C/O Meal Time Pen @ 1.5	\$ 1,552	43	\$ 1,552		
WAREH	025	C/O Meal Time Pen @ 2.0	\$ 1,407	29	\$ 1,407		
WAREH	121	Meals	\$ 1,788	149	\$ 1,788		
WAREH	125	Higher Duty - Difference	\$ 1,195	654			
Total			\$ 232,364	9,529	\$ 59,701	1,416	8,578
WASTW	001	REGULAR EARNINGS	\$ 26,251	942			942
WASTW	008	Pre/Post Roster OT @ 1.5	\$ 230	6	\$ 230	6	6
WASTW	015	Call-out OT @ 1.5	\$ 501	12	\$ 501	12	12
WASTW	016	Call-out OT @ 2.0x	\$ 1,503	27	\$ 1,503	27	27
WASTW	017	Scheduled OT @ 1.5x	\$ 2,027	48	\$ 2,027	48	48
WASTW	018	Scheduled OT @ 2.0x	\$ 922	16	\$ 922	16	16
WASTW	024	C/O Meal Time Pen @ 1.5	\$ 42	1	\$ 42		
WASTW	025	C/O Meal Time Pen @ 2.0	\$ 56	1	\$ 56		
WASTW	121	Meals	\$ 72	6	\$ 72		
WASTW	125	Higher Duty - Difference	\$ 226	120			
Total			\$ 31,829	1,178	\$ 5,352	109	1,050
WMAP	001	REGULAR EARNINGS	\$ 74,043	3,672			3,672
WMAP	004	EXTRA STRAIGHT TIME	\$ 21	1	\$ 21	1	1
WMAP	008	Pre/Post Roster OT @ 1.5	\$ 5,996	200	\$ 5,996	200	200
WMAP	009	Pre/Post Roster OT @ 2.0	\$ 376	10	\$ 376	10	10
WMAP	015	Call-out OT @ 1.5	\$ 53	2	\$ 53	2	2
WMAP	017	Scheduled OT @ 1.5x	\$ 393	13	\$ 393	13	13
WMAP	021	Penalty @.5X	\$ 11	1	\$ 11		
WMAP	024	C/O Meal Time Pen @ 1.5	\$ 1,101	37	\$ 1,101		
WMAP	025	C/O Meal Time Pen @ 2.0	\$ 191	5	\$ 191		
WMAP	121	Meals	\$ 1,032	86	\$ 1,032		
Total			\$ 83,217	4,026	\$ 9,174	226	3,898
Grand Total			\$ 20,374,375	814,370	\$ 4,902,533	99,432	611,065

CA-IR-117

Ref: T-9, pages 84-86, & HELCO-WP-918 (Standard Labor Rates).

HELCO-WP-918 adjusts 2004 historical labor rates, by labor class, in order to restate overtime included in the standard labor rates consistent with 2006 budget year conditions. Using the BUOC labor class for illustration purposes, please provide the following

- a. Column C of HELCO-WP-918 is labeled "OT adj \$" which implies that the overtime dollars in that column have been adjusted from the actual 2004 values. Please confirm that the overtime dollars in Column C represent actual, not adjusted, overtime dollars in calendar 2004 for each labor class. If this cannot be confirmed, please provide a detailed explanation of the OT dollars in this column.
- b. Column D of HELCO-WP-918 is labeled "OT adj hrs" which implies that the overtime hours in that column have been adjusted from the actual 2004 values. Please confirm that the overtime hours in Column D represent actual, not adjusted, overtime hours in calendar 2004 for each labor class. If this cannot be confirmed, please provide a detailed explanation of the OT hours in this column.

HELCO Response:

- a. Yes, the overtime dollars in Column C represent actual, not adjusted, overtime dollars in calendar 2004 for each labor class.
- b. Yes, the overtime hours in Column D represent actual, not adjusted, overtime hours in calendar 2004 for each labor class.

CA-IR-118

Ref: T-9, pages 84-86, & HELCO-WP-918 (Standard Labor Rates).

The "Sheet2" tab of spreadsheet "918WP.xls" supporting HELCO-Wp-918 contains "Tran_Type" codes. "LAB" represents labor costs. Please describe the following "Tran_Type" codes:

- a. +TL
- b. -TL
- c. +TM
- d. -TM
- e. LCR
- f. MPJ

HELCO Response:

a. – f. The definitions of the Tran_Type codes are as follows:

- +TL WO/PROJ REALLOC - IN - LABOUR COSTING ENTRIES
- TL WO/PROJ REALLOC - OUT - LABOUR COSTING ENTRIES
- +TM WO/PROJ REALLOC - IN - MANUAL JOURNAL VOUCHERS
- TM WO/PROJ REALLOC - OUT - MANUAL JOURNAL VOUCHERS
- LCR Credit Labour Variance
- MPJ Manual Journal Voucher - Primary

CA-IR-119

Ref: T-9, page 92, & HELCO-920 (Pension Asset).

Beginning at line 23 of the referenced testimony, Mr. Fujioka indicates that the Company has a policy to make pension fund contributions in an amount not less than the minimum funding requirements under ERISA and not greater than the maximum tax-deductible amount. Referring to HELCO-920, please provide the ERISA minimum and IRC maximum tax deductible amount for each year during the period 1987 through 2006. If the requested information is not available, please explain.

HELCO Response:

The requested information is attached.

HELCO Retirement Plan
Summary of ERISA Minimum Contribution Requirement
and Maximum Tax Deductible Contribution

<u>Year</u>	ERISA Minimum Contribution Requirement	Maximum Tax Deductible Contribution
1987	\$ 370,498	\$ 2,021,493
1988	135,516	1,977,965
1989	245,851	2,338,149
1990	479,656	2,503,915
1991	222,423	2,723,615
1992	0	2,448,631
1993	0	2,532,538
1994	0	2,549,803
1995	0	2,818,477
1996	0	2,990,043
1997	0	2,249,636
1998	0	0
1999	0	0
2000	0	0
2001	0	0
2002	0	0
2003	0	6,239,176
2004	0	14,497,791
2005	0	14,519,164
2006	0	19,689,578 est.*

* maximum tax deductible contribution assumes existing rules from 2005 are extended to plan year 2006 - pending outcome of pension reform legislation

CA-IR-120

Ref: T-9, page 92, & HELCO-920 (Pension Asset).

HECO-920 provides a multi-year comparison of pension trust contributions and NPPC accruals. Please provide the following:

- a. Please identify and describe the impact of revisions to key assumptions, actual returns, plan amendments or other key factors causing the dramatic change in NPPC from a positive \$1.1 million in 1998 to negative levels in 2000-2002.
- b. Please identify and describe the impact of revisions to key assumptions, actual returns, plan amendments or other key factors causing the dramatic change in NPPC from \$76,000 (2004) to \$875,000 (2005) to \$2.7 million (2006 forecast).
- c. No pension contributions were made in calendar years 1999-2002 or are estimated for 2006. Please provide the following:
 1. Was the Company restricted from making pension fund contributions in any of these years? Please explain.
 2. If the response to part (c)(1) of this information request does not identify any restrictions prohibiting the Company from making fund contributions, please identify and describe the key factors that caused HELCO to not make any fund contributions in the identified years.

HELCO Response:

- a. The change in NPPC from a positive \$1.1 million in 1998 to negative levels in 2000-2002 was caused primarily by the large asset gains that occurred during 1995-1999 as a result of higher stock prices. Asset gains and losses are recognized in the four years following the year in which they occur so their effects can be delayed. The large asset gains during 1995-1999 caused high asset levels during 2000-2002, resulting in high expected asset returns (one component of NPPC) as well as gain amortizations (another component of NPPC) which, in turn, caused the negative NPPC amounts.
- b. The key factors causing the change in NPPC from \$76,000 in 2004 to \$875,000 in 2005 and \$2.7 million for test year 2006 were the asset losses that occurred during 2000-2002

and the decreasing discount rate from 2004 to 2006 (6.25% for 2004, 6.00% for 2005, and 5.75% for 2006). These factors resulted in lower expected asset return amounts and higher loss amortizations which, in turn, caused the increases in NPPC.

- c.1. Yes, HELCO was restricted from making pension fund contributions from 1999 through 2002 in that HELCO was not required to make a minimum contribution under ERISA and could not make deductible fund contributions under the Internal Revenue Code (IRC). Contributions in excess of the IRC maximum contribution would be subject to a 10% non-deductible excise tax, effectively a 10% penalty for contributions, under Section 4972 of the IRC. See HELCO T-9, page 106 for a more detailed discussion.

With respect to test year 2006, HELCO is not required to make a minimum contribution under ERISA, but can make a tax deductible contribution up to a maximum of approximately \$19.7 million, assuming that existing rules from 2005 are extended to plan year 2006 (pending the outcome of pension reform legislation).

- c.2. With respect to test year 2006, HELCO is currently not planning to make any contributions during 2006 because the cumulative contributions to date exceed the cumulative pension cost amounts to date.

CA-IR-121

Ref: T-9, page 93 (Pension Asset).

Beginning at line 13, the referenced testimony discusses why HELCO believes that it is proper to include a prepaid pension asset in rate base. The first item states: "rate base inclusion is consistent with the ratemaking treatment of the pension expense under the guidance set forth in SFAS 87." Please provide the following:

- a. Is it the intention of HELCO T-9 to represent that SFAS 87 (i.e., FAS87) contains guidance that specifically discusses the ratemaking treatment of pension expense? Please explain.
- b. Is it the opinion of HELCO T-9 that FAS87 imposes ratemaking requirements on regulatory agencies, such as the HPUC, in determining overall revenue requirement? Please explain.
- c. If the responses to parts (a) or (b) of this information request are affirmative, please provide a pinpoint citation to the paragraphs of FAS87 that are believed to be controlling for ratemaking purposes. If none, please so state.

HELCO Response:

- a. No, HELCO T-9 is not representing that SFAS 87 contains guidance with respect to the ratemaking treatment of pension expense. SFAS 87 provides guidance (Generally Accepted Accounting Principles, or GAAP) with respect to the financial statement treatment of pension expense. HELCO's position is that an accounting methodology should be consistently applied for cost recognition and rate base. For pension, SFAS 87 has consistently been used as the basis for cost determination (financial statement treatment) and therefore the methodology should be consistently applied to items included as additions or reductions in rate base. HELCO's position is more fully discussed in HELCO T-9, page 108, line 13, through page 111, line 1.
- b. No. See response to part a. above.
- c. Not applicable.

CA-IR-122

Ref: T-9, page 93 (Pension Asset).

Beginning at line 13, the referenced testimony discusses why HELCO believes that it is proper to include a prepaid pension asset in rate base. The second item states: “the prepaid pension asset reflects a prudent investment, funded by investors, that is used or useful in providing electric utility service.” Please provide the following:

- a. Please define the phrase “used and useful” as employed in this context.
- b. Please explain how the pension asset is used and useful in providing utility service.
- c. In the absence of the pension asset, would HELCO be unable to provide safe and adequate service to its utility customers? Please explain.

HELCO Response:

- a. With respect to the prepaid pension asset, the use of the term “used or useful” is intended to be consistent with the usual use of the term in the regulatory context, i.e. an asset that is in place and is either being used or is ready for use in the provision of electric service.
- b. The prepaid pension asset resulted from the prudent management of HELCO’s pension plan. The pension plan is an integral part of the Company’s compensation package to its employees, and is necessary to attract and retain quality employees that are engaged in providing electric service to the public. See HELCO T-9, pages 104-108 and pages 111-113.
- c. Without its pension plan, all other things remaining the same, HELCO would not be able to attract and retain the quality of employees currently in its workforce, and while service could still be provided, the quality of service would be lower. Similarly, if a given physical asset currently included in rate base did not exist, the Company could still provide service, but the service would be at a lower level of quality.

CA-IR-123

Ref: T-9, pages 93 & 113 (Pension Asset).

Beginning at line 13 of page 93, the referenced testimony discusses why HELCO believes that it is proper to include a prepaid pension asset in rate base. The third item states: “the prepaid pension asset benefits the ratepayers.” Please provide the following:

- a. Please define the word “benefit” as used in this context.
- b. Please quantify the benefits that ratepayers have received from the existence of the pension asset, beginning in calendar year 1998 (see HELCO-920).
- c. Referring to part (b) of this information request, please provide a copy of all supporting documents and workpapers, including spreadsheet files with intact cell formulae.

HELCO Response:

- a. As used in the context of ratepayer benefit, the word “benefit” means “to be helpful or useful to”, as taken from The American Heritage Dictionary of the English Language.
- b. Other than what is already provided in testimony, the Company has not quantified ratepayer benefits resulting from the prepaid pension asset. However, ratepayers have benefited from the prepaid pension asset, and its components, in several ways. The benefits include a negative Net Periodic Pension Cost (“NPPC”) in prior years, lower costs added to rate base due to lower construction work in progress amounts upon which AFUDC is accrued, larger pension plan assets upon which to earn a return, which lowers the NPPC, and an adequately funded pension plan which helps to maintain HELCO’s financial flexibility and credit quality. See HELCO T-9, pages 113-115 for a more detailed discussion and some general quantifications of ratepayer benefits.
- c. Not applicable.

CA-IR-124

Ref: T-9, pages 93 & 115 (Pension Asset).

Beginning at line 13 of page 93, the referenced testimony discusses why HELCO believes that it is proper to include a prepaid pension asset in rate base. The fourth item states: "other jurisdictions have allowed a prepaid pension asset to be included in rate base." At page 115, HELCO T-9 states that the pension asset treatment by other jurisdictions was discussed in the opening and reply briefs of the parties in HECO's 2005 test year (Docket No. 04-0113). Please provide the following:

- a. Has any research into the regulatory treatment of the pension asset by other jurisdictions been conducted by, or for, HELCO specifically for the pending rate case docket? Please explain.
 1. If so, please identify and describe the nature and extent of that research.
 2. If so, please provide the results of said research, along with a copy of all documentation obtained, reviewed and relied upon.
- b. Referring to the opening and reply briefs filed by the parties in HECO's 2005 rate case test year (Docket No. 04-0113), it appears that the referenced research is contained in the responses to DOD-RIR-36 and HECO/CA-IR-204.
 1. Is HELCO aware of any additional research surrounding the pension asset issue other than these two responses?
 2. If so, please identify and provide a copy of any such documentation.
- c. Did HELCO T-9 review the responses to DOD-RIR-36 and HECO/CA-IR-204 (i.e., containing pension asset research from Docket No. 04-0113) in the preparation and presentation of HELCO's pension asset recommendation for purposes of the pending rate case (Docket No. 05-0315)? Please explain.

HELCO Response:

- a. No research has been conducted by, or for, HELCO specifically for this instant docket since the information provided in Docket No. 04-0113, HECO's test year 2005 rate case, regarding the treatment of the prepaid pension asset by other jurisdictions is relatively current.
 - a.1. Not applicable.
 - a.2. Not applicable.

- b.1. No, HELCO is not aware of any additional research.
- b.2. Not applicable.
- c. Support personnel involved in Docket No. 04-0113 and/or Docket No. 05-0315 reviewed the responses to the referenced IR and RIR.

CA-IR-125

Ref: T-9, page 93 (Pension Asset).

At lines 19-22, HELCO T-9 indicates that the Commission allowed the prepaid pension asset in rate base in HELCO's 2000 test year rate case. Please provide the following:

- a. Please provide the amount of the prepaid pension asset included in rate base in HELCO's 2000 test year rate case.
- b. Please provide the amount of the accumulated deferred income tax reserves associated with the prepaid pension asset included in HELCO's 2000 test year rate case.
- c. Please confirm that no party to HELCO's 2000 test year rate case opposed the Company's request to include the pension asset in rate base. If this cannot be confirmed, please explain and provide a pinpoint reference to each party witness opposing such request.
- d. Does HELCO believe that the Commission's inclusion of the prepaid pension asset in rate base in the 2000 test year rate case represents a controlling precedent for purposes of the disposition of this issue in the pending rate case? Please explain.
- e. Does HELCO believe that decisions of the Commission in prior HELCO rate cases represent controlling precedents for purposes of the disposition of substantially similar issues in the pending rate case? Please explain.

HELCO Response:

- a. The prepaid pension asset included in rate base in HELCO's 2000 test year rate case was \$1,413,000, i.e. the average of -\$88,000 (beginning of year balance) and \$2,914,000 (end of year balance).
- b. The accumulated deferred income tax reserves associated with the prepaid pension asset in HELCO's 2000 test year rate case was \$287, i.e. the average of \$958,848 (beginning of year balance) and negative \$958,274 (end of year balance). The detailed calculation is attached.
- c. HELCO confirms that no party to HELCO's test year 2000 rate case opposed the Company's request to include the pension asset in rate base.

- d. See response to CA-IR-126, part b.
- e. See response to CA-IR-126, part b.

Hawaii Electric Light Company, Inc.
Accumulated Deferred Tax Liability (ADIT) - Pension
SOURCE: 2000 Rate Case (Docket No. 99-0207)

	DR (CR)		HELCO Reference 2000 Rate Case
	Adjusted Actual 12-31-99	Estimate 12-31-00	
Federal ADIT	838,796	(782,310)	HELCO-RWP-1303, p. 1
Less: Disallowance of nonqualified pension	<u>27,826</u>	<u>27,826</u>	HELCO-RWP-1303, p. 2
As Adjusted	<u>810,970</u> (a)	<u>(810,136)</u> (b)	
State ADIT	152,966	(143,050)	HELCO-RWP-1303, p. 3
Less: Disallowance of nonqualified pension	<u>5,088</u>	<u>5,088</u>	HELCO-RWP-1303, p. 4
As Adjusted	<u>147,878</u> (a)	<u>(148,138)</u> (b)	
<u>Average Accumulated Deferred Tax Liability Calculation:</u>			
12-31-99 Adjusted Actual	958,848	Σ (a)	
12-31-00 Estimate	(958,274)	Σ (b)	
Average Accumulated Deferred Tax Liability	<u>287</u>		

CA-IR-126

Ref: T-9, pages 93-94 (Pension Asset).

Beginning at line 23, HELCO T-9 refers to HECO's 2005 test year rate case and indicates that the Commission allowed the prepaid pension asset in rate base in its interim decision (Decision and Order No. 22050, Docket No. 04-0113). Please provide the following

- a. Does HELCO believe that the Commission's inclusion of the prepaid pension asset in the referenced interim decision involving HECO represents a controlling precedent for purposes of the disposition of this issue in the pending HELCO rate case? Please explain.
- b. Does HELCO believe that the decisions of the Commission in prior HECO rate cases represent controlling precedents for purposes of the disposition of substantially similar issues in the pending HELCO rate case? Please explain.

HELCO Response:

- a. The inclusion of an expense in revenue requirements for purposes of an interim rate case decision is not deemed to be controlling with respect to the final decision in same case.
See also response to CA-IR-126, part b.
- b. The following is in response to apparently similar questions from the Consumer Advocate (CA-IR-125, parts d. and e. and part a. of this CA-IR-126) with respect to whether Commission decisions in prior rate cases for HELCO or HECO represent controlling precedents for purposes of this instant docket. HELCO acknowledges that the Commission has broad latitude in rendering its rate case decisions, and HELCO is not implying that the Commission must repeat its rate case decisions in subsequent rate cases. Having said that, HELCO's position is that, in general, the Commission's use of precedent in rate case decisions provides for more predictable and efficient regulation, which is good for all parties involved in the regulatory process.

The Commission's use of precedent in its decision making provides for more predictable regulation, which assists HELCO in managing its operations. If, during the

years between rate cases, HELCO cannot generally rely on Commission decisions made in previous rate cases, especially where the issues were litigated and remain substantially the same, management's decision making process would be more difficult due to the uncertainty. For example, public utilities must be afforded a reasonable opportunity to earn a fair rate of return. The Company would be harmed and could be denied a reasonable opportunity to earn the return found to be fair, if it incurs costs it understands will be recoverable based on previous Commission decisions, but cost recovery is subsequently denied.

The Commission's use of precedent provides for more efficient regulation in that the adjudication of rate cases is simplified. It would seem counterproductive if the same issues were litigated in every rate case proceeding, even if the positions and arguments by each of the parties remain essentially the same, unless it was possible that the Commission may change its decision in the matter from time to time. Because of precedent, HELCO has removed from its test year budgeted numbers certain costs, e.g. incentive compensation amounts, that have been denied by the Commission in prior rate case dockets, rather than litigate the issues again in this case, although it retains the right to raise the issues in future cases.

This Commission has in the past applied precedent numerous times in various situations with respect to its rate case decisions. For example, in Decision and Order No. 14412, Docket No. 7766 (HECO's test year 1995 rate case), the Commission states on page 29 with respect to postretirement benefits expense: "We held in the past that the cost of life insurance policies for utility company's executives should be borne by the company's shareholders and should not be expensed for ratemaking purposes."¹¹ Thus,

the cost of life insurance for HECO's senior management personnel must be excluded from the costs of postretirement benefits." In Decision and Order No. 11699, Docket No. 6998 (HECO's test year 1992 rate case), the Commission states on page 85 with respect to regulatory commission expense: "In most of the past rate cases, we accepted a three-year amortization of regulatory commission expense. We applied a three-year amortization period in the recent HELCO rate case (Docket No. 6432), as well as in HECO's last rate case (Docket No. 6531). We will also apply it in this docket." In Decision and Order No. 15480, Docket No. 94-0140 (HELCO's test year 1996 rate case), the Commission states on page 59 with respect to the cost of capital: "In past rate cases, we rejected the use of the Standard & Poor's 500 companies as comparables . . . , and we reject their use by the Consumer Advocate in its comparable earnings test in this docket." In Decision and Order No. 11893, Docket No. 6999 (HELCO's test year 1992 rate case), the Commission states on pages 38 and 39 with respect to vacation expense: "The commission in In re Haw. Tel. Co., Docket No. 4588, Decision and Order No. 8042 (Aug. 14, 1984), ruled that accrued vacation expense will not be allowed as an expense for ratemaking purposes...HELCO disagrees with our ruling, but for purposes of this docket, it conforms to the ruling...Based on our prior decision, we accept HELCO's reduction of vacation expense by \$38,000."

From a "legal" standpoint, (although HELCO is not required to and objects to providing legal opinions in information requests), HELCO's understanding is that res judicata (claim preclusion) would not apply from rate case to rate case unless the test year was the same. Collateral estoppel (issue preclusion) generally does not apply to policy issues determined in rate cases with different test years, although it could apply to certain

determinations of fact that were fully “contested” in a prior rate case. Policy determinations made in one rate case are precedent in subsequent rate cases. As a matter of sound administrative policy, such policy determinations (while not binding in subsequent cases from a prospective viewpoint) should be given substantial weight in subsequent cases. Arbitrary changes in policy that are not based on changes in circumstances or reasoned changes in policy to be applied prospectively (taking into consideration the possible need to transition to the new policy) would probably not be sustained on appeal based on H.R.S. §§91-10(1) and 91-14(g). Moreover, the party seeking a change in policy would have the burden of proof pursuant to H.R.S. §91-10(5).

CA-IR-127

Ref: T-9, page 96 (Pension Asset).

At line 18, HELCO T-9 states, in part: "If the Company forecasts a pension liability, the pension liability is treated as a deduction in the rate base calculation." Please provide the following:

- a. Has HELCO ever forecasted a pension liability that has been used as a rate base reduction in setting utility rates? If so, please explain.
- b. Have any of HELCO's regulated affiliates (i.e., HECO or MECO) ever forecasted a pension liability that has been used as a rate base reduction in setting utility rates? If so, please explain.

HELCO Response:

- a. HELCO has not forecasted a pension liability that has been used as a rate base reduction in a past rate case. In the Company's last rate case (HELCO 2000 test year, Docket No. 99-0207), the Commission found that HELCO's prepaid pension asset estimate of \$1.4 million was reasonable in determining rate base (D&O 18635 dated February 8, 2001).
- b. In Docket No. 97-0346, MECO 1999 test year rate case, MECO did forecast a pension liability of \$1.2 million. MECO and the CA stipulated to a test year estimate for non-funded qualified pension liability of \$762,000 at year-end 1998 and \$1,639,000 at year-end 1999. The pension liability was a deduction in the rate base calculation. The Commission found the stipulated pension liability estimate reasonable in D&O 16922 dated April 6, 1999.

CA-IR-128

Ref: T-9, page 96 (Pension Asset).

At line 20, HELCO T-9 states, in part: "The Company's forecast of working cash is based on the accrual method of accounting for the pension, consistent with the other pension components." Referring to HELCO-1002 and HELCO-920, the NPPC for the forecast test year is \$2.686 million. Please provide the following:

- a. Please explain and describe the Company's intended purpose for referencing working cash in the context of the pension asset discussion.
- b. Please quantify the effect of the \$2.686 million NPPC on HELCO's forecast of working cash.

HELCO Response:

- a. The purpose for referencing working cash in the context of the pension asset discussion is to point out that HELCO has consistently used SFAS 87 as the basis for cost recognition, and in the calculation of rate base (pension asset and the calculation of working cash). HELCO's position is that an accounting methodology should be consistently applied for cost recognition and rate base. See also HELCO's response to CA-IR-121.
- b. As presented in HELCO-WP-1606, page 20, pension expense is estimated to be \$1,773,000. This is 66% of the \$2,686,000 NPPC and represents an estimation of the NPPC charged to O&M. As illustrated on the attached page, there is an \$185,000 increase in working cash from the revenue collection lag attributable to the \$1,773,000 pension expense. See response to CA-IR-193(a) for discussion of the payment lag attributable to the pension expense.

Hawaii Electric Light Company, Inc.
Pension Working Cash Impact
(\$ in thousands)

(A) Revenue Collection Lag (Days)	Payment Lag Workpaper Reference	(B) Payment Lag (Days)	(C) Net Collection Lag (Days) (A) - (B)	Annual Amount Workpaper Reference	(D) Annual Amount	(E) Average Daily Amount - Present (D) / 365	(F) Working Cash Required (Provided) under Present Rates (C) x (E)	(G) Average Daily Amount - Proposed (D) / 365	(H) Working Cash Required (Provided) under Proposed Rates (C) x (G)	
per HELCO- WP-708		HELCO WP-1606		HELCO WP-1606						
Pension Expense	38	p. 20	0	38	p. 20	1,773	5	185	5	185

CA-IR-129

Ref: T-9, page 96, & HELCO-920 (Pension Asset).

Footnote 1 states that approximately 31% of the 2006 test year NPPC was allocated to corporate overhead with “most” of the allocated portion capitalized to plant in service, with some charged to outside third parties. Please provide the following:

- a. Please provide the calculation supporting the 31% capitalization factor.
- b. Please define “most” as used in this context. In other words, what percentage of corporate overheads does HELCO typically expect to be capitalized (e.g., 75%, 95%, etc.).
- c. Referring to HELCO-920, please provide the comparable percentage of NPPC allocated to corporate overhead in each year (1987-2005) since HELCO adopted FAS87.
- d. Is there any reason to believe that the response to part (b) of this information request would be materially different for calendar years 1987-2005? If so, please explain.

HELCO Response:

- a. Footnote 1 refers to one of HELCO’s on-costs (also referred to as overheads), i.e. the Employee Benefits Transferred – Credit on-cost. The Employee Benefits Transferred – Credit on-cost is discussed in HELCO T-9, pages 63 through 65. The calculation supporting the 31% capitalization factor can be performed using amounts shown on HELCO-910. Referring to HELCO-910, dividing the last amount labeled as “Employee Benefits Transferred – Direct Testimony” (\$2,125,135) by the “Total Employee Benefits Cost Pool” amount at the middle of the page (\$6,869,272) produces a percentage of 30.94%, or 31%. Note: A complete list of HELCO’s on-costs is provided on HELCO-906.
- b. In the context of Footnote 1, “most” refers only to the Employee Benefits Transferred – Credit on-cost. In this context, “most” means that most of the \$2,125,135 transferred out of Administrative and General Expenses would generally be allocated to construction

work in progress and ultimately capitalized, and the remaining amount would be billed to outside third parties for services rendered. Actually, for test year 2006, all of the total \$2,125,135 transfer amount is estimated to be transferred to construction work in progress and ultimately capitalized. The high capitalization percentage of the Employee Benefits Transferred amount is typical.

- c. The requested comparable percentages of Total Employee Benefits Transferred for years 1987-2005 are attached (see line G). Note that the information required to calculate the percentages for 1988 was not located.
- d. No. While the percentage of total employee benefit costs that are transferred each year can fluctuate (see line G on attached schedule), most of the transfer amounts are capitalized each year (see line H on the attached schedule).

**Hawaii Electric Light Company, Inc.
Employee Benefits Transferred**

<u>Line</u>	<u>Description</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>
A	Total EB* Cost Pool	\$ 4,625,272	\$ 3,446,302	\$ 5,263,145	\$ 208,147	\$ (756,621)	\$ (380,271)	\$ 4,013,694	\$ 5,355,426	\$ 7,062,177
<u>Transfer Amounts</u>										
B	EB* Transfer to Construction	\$ 885,442	\$ 645,711	\$ 1,027,590	\$ 27,299	\$ (163,617)	\$ (92,904)	\$ 419,849	\$ 2,036,511	\$ 2,527,372
C	EB* Transfer to Other	\$ 148	\$ -	\$ 258	\$ 11	\$ (96)	\$ 1,608	\$ 7,579	\$ 135,716	\$ 79,133
D	Total EB Transferred	<u>\$ 885,590</u>	<u>\$ 645,711</u>	<u>\$ 1,027,848</u>	<u>\$ 27,310</u>	<u>\$ (163,712)</u>	<u>\$ (91,296)</u>	<u>\$ 427,428</u>	<u>\$ 2,172,228</u>	<u>\$ 2,606,505</u>
<u>Transfer Percentages</u>										
E	EB* Transfer to Construction (B/A)	19.14%	18.74%	19.52%	13.12%	21.62%	24.43%	10.46%	38.03%	35.79%
F	EB* Transfer to Other (C/A)	0.00%	0.00%	0.00%	0.01%	0.01%	-0.42%	0.19%	2.53%	1.12%
G	Total EB Transferred (D/A)	<u>19.1%</u>	<u>18.7%</u>	<u>19.5%</u>	<u>13.1%</u>	<u>21.6%</u>	<u>24.0%</u>	<u>10.6%</u>	<u>40.6%</u>	<u>36.9%</u>
H	Transfer Amount Capitalized (B/D)	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>99.9%</u>	<u>101.8%</u>	<u>98.2%</u>	<u>93.8%</u>	<u>97.0%</u>

* EB = Employee Benefits

**Hawaii Electric Light Company, Inc.
Employee Benefits Transferred**

<u>Line</u>	<u>Description</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>	<u>1993</u>	<u>1992</u>	<u>1991</u>	<u>1990</u>	<u>1989</u>	<u>1988</u>	<u>1987</u>
A	Total EB* Cost Pool	\$7,648,712	\$7,345,481	\$4,891,551	\$4,312,512	\$4,341,372	\$4,093,075	\$3,356,179	\$3,352,989	N/A	\$3,034,191
<u>Transfer Amounts</u>											
B	EB* Transfer to Construction	\$2,868,147	\$2,742,310	\$1,612,774	\$1,522,823	\$1,479,755	\$1,595,473	\$1,234,011	\$1,212,535	N/A	\$1,155,079
C	EB* Transfer to Other	\$ 69,610	\$ 68,776	\$ 90,538	\$ 114,914	\$ 127,146	\$ 54,839	\$ 64,092	\$ 113,248	N/A	\$ 128,328
D	Total EB Transferred	<u>\$2,937,757</u>	<u>\$2,811,086</u>	<u>\$1,703,310</u>	<u>\$1,637,737</u>	<u>\$1,606,901</u>	<u>\$1,650,312</u>	<u>\$1,298,103</u>	<u>\$1,325,783</u>	N/A	<u>\$1,283,407</u>
<u>Transfer Percentages</u>											
E	EB* Transfer to Construction (B/A)	37.50%	37.33%	34.38%	35.31%	34.08%	38.98%	36.77%	36.16%	N/A	38.07%
F	EB* Transfer to Other (C/A)	0.91%	0.94%	1.93%	2.66%	2.93%	1.34%	1.91%	3.38%	N/A	4.23%
G	Total EB Transferred (D/A)	<u>38.4%</u>	<u>38.3%</u>	<u>36.3%</u>	<u>38.0%</u>	<u>37.0%</u>	<u>40.3%</u>	<u>38.7%</u>	<u>39.5%</u>	N/A	<u>42.3%</u>
H	Transfer Amount Capitalized (B/D)	<u>97.6%</u>	<u>97.6%</u>	<u>94.7%</u>	<u>93.0%</u>	<u>92.1%</u>	<u>96.7%</u>	<u>95.1%</u>	<u>91.5%</u>	N/A	<u>90.0%</u>

* EB = Employee Benefits

CA-IR-130

Ref: T-9, page 97 (Pension Asset).

At line 2, HELCO T-9 indicates that there is an accumulated deferred income tax liability amount associated with the pension asset. Please provide the following:

- a. Please quantify the amount of the deferred income tax liability associated with the \$14.172 million (average) pension asset HELCO proposes to include in rate base.
- b. Referring to part (a) of this information request, please provide a copy of all workpapers and electronic spreadsheet files supporting the calculation of the average deferred income tax liability balance. Please ensure that the workpapers set forth all calculations, state all assumptions, and explain the basis for such assumptions. In addition please ensure that the electronic spreadsheets have all cell references, links to files, and formula in-tact and not converted to values.

HELCO Response:

- a. A revised schedule of deferred income tax liability for the pension is attached. The corrected average 2006 accumulated deferred tax liability is \$4,594,000. Please refer to CA-IR-130, page 2.
- b. Please refer to CA-IR-130, page 3. Changes in the accumulated deferred tax liability are a result of the reversal of book pension expense and the deduction of contributions.

Hawaii Electric Light Company, Inc.
Accumulated Deferred Tax Liability (ADIT) - Pension

	DR (CR)		
	Actual 12-31-05	Estimate 12-31-06	
Federal ADIT	(4,325,530) (a)	(3,441,977) (b)	CA-IR-130, page 3
State ADIT	(791,367) (a)	(629,804) (b)	CA-IR-130, page 3
<u>Average 2006 (ADIT) Calculation:</u>			
Actual 12-31-05, as adjusted	(5,116,897) Σ (a)		
12-31-06 Estimate, as adjusted	(4,071,781) Σ (b)		
Average 2006 ADIT	<u>(4,594,339)</u>		

Hawaii Electric Light Company, Inc.
Accumulated Deferred Tax Liability (ADIT) - Pension

	Contribution (A)	Book (Benefit) Expense (A)	Addback/ (Deduct) Temporary Difference	DR (CR)			
				Federal Deferred Liability (B)	State Deferred Liability (B)	Total Deferred Liability (B)	
				32.89474%	6.01504%	38.90977%	
Adjusted Actual Balance 1999				838,796	152,966	991,762	CA-IR-125
Less: Nonqualified Pension				27,826	5,088	32,914	CA-IR-125
Balance Per 2000 Rate Case				810,970	147,878	958,848	CA-IR-125
Nonqualified Pension Adjustment (C)				3,862	706	4,568	
Actual 12/31/99 Balance(D)				807,108	147,172	954,280	
2000 Transactions		(3,106,791)	(3,106,791)	(1,021,971)	(186,875)	(1,208,845)	
Adjusted 12/31/00 Balance				(214,863)	(39,703)	(254,565)	
2001 Transactions		(3,399,171)	(3,399,171)	(1,118,148)	(204,461)	(1,322,610)	
Adjusted 12/31/01 Balance				(1,333,011)	(244,164)	(1,577,175)	
2002 Transactions		(2,557,283)	(2,557,283)	(841,212)	(153,822)	(995,033)	
Adjusted 12/31/02 Balance				(2,174,223)	(397,986)	(2,572,208)	
2003 Transactions	(3,620,726)	1,497,951	(2,122,775)	(698,281)	(127,686)	(825,967)	
Adjusted 12/31/03 Balance				(2,872,504)	(525,671)	(3,398,175)	
2004 Transactions	(4,868,450)	76,335	(4,792,115)	(1,576,354)	(288,248)	(1,864,601)	
Adjusted 12/31/04 Balance				(4,448,857)	(813,919)	(5,262,776)	
2005 Transactions	(500,000)	874,916	374,916	123,328	22,551	145,879	
Adjusted 12/31/05 Balance				(4,325,530)	(791,367)	(5,116,897)	
2006 Estimated Transactions		2,686,000	2,686,000	883,553	161,564	1,045,117	
Estimated 12/31/06 Balance				(3,441,977)	(629,804)	(4,071,781)	

NOTES>

(A) Source: HELCO-920, page 1.

(B) Source: HELCO-WP-1302, page 1.

(C) Federal exclusion should have been \$31,688 per review of HELCO-WP-1305a, page 2. State exclusion should have been \$5,794 per review of HELCO-WP-1605b, page 2.

(D) Federal balance from HELCO-WP-1305a, page 1. State balance from HELCO-WP-1305b, page 1.

CA-IR-131

Ref: T-9, page 98 (Pension Asset).

Please identify the current members of the Pension Investment Committee ("PIC"), indicating each individual's employer and when each member was appointed or elected to PIC.

HELCO Response:

The requested information is as follows:

<u>PIC Member Name</u>	<u>Employer</u>	<u>Date Appointed</u>
Constance H. Lau	HEI	02/21/1989
T. Michael May	HECO	09/01/1995
Eric K. Yeaman	HEI	02/25/2003
Patricia U. Wong	HEI	06/28/2005

CA-IR-132

Ref: T-9, pages 101-102 (Pension Asset).

Beginning at line 3 of page 101, HELCO T-9 generally describes the significance of comparing the fair value of the pension plan assets to the accumulated benefit obligation (ABO). Page 102 discusses, in part, that the pension plan assets only exceeded the ABO by \$.9 million at 12/31/05 and the accounting requirements imposed by FAS87 if the fair value of the pension plan assets were less than the ABO. Please provide the following:

- a. Please confirm the accuracy of the above summary. If this cannot be confirmed, please explain.
- b. If the Commission were to adopt HELCO's proposal to include the pension asset in rate base, please confirm that such a determination would have no effect on whether the fair value of the pension plan assets will or will not exceed the ABO in future years. If this cannot be confirmed, please explain.

HELCO Response:

- a. The referenced pages of the testimony speak for themselves. In general, the passages above summarize the referred testimony.
- b. A Commission decision to include the pension asset in rate base will have an effect on whether the fair value of the pension plan assets exceeds or does not exceed the ABO in future years, to the extent that such a decision encourages HELCO to continue to keep the pension plan adequately funded. Adequately funding the pension plan results in a higher fair value of pension plan assets, other things being equal.

CA-IR-133

Ref: T-9, page 104 (Pension Asset).

At line 17, HELCO T-9 identified the deadline for submitting comments on FASB's Exposure Draft No. 1025-300 at May 31, 2006. Please provide the following:

- a. Did HELCO, HECO, MECO or HEI file or participate in the filing of comments on this exposure draft?
- b. If so, please provide a copy of those comments.
- c. If not, please explain why HELCO or its affiliate companies chose to not response to the FASB exposure draft.

HELCO Response:

- a. No.
- b. Not applicable.
- c. HELCO and its affiliated companies did not file comments on the FASB exposure draft because HELCO and its affiliated companies agree with the comments which were filed by the Edison Electric Institute (EEI). A copy of the comments filed by EEI is attached.

701 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2696
Telephone 202-508-5527



May 31, 2006

Ms. Suzanne Bielstein
Director – Major Projects and Technical Activities
Financial Accounting Standards Board
401 Merritt 7
P.O. Box 5116
Norwalk, CT 06856-5116

Subject: File Reference No. 1025-300

Dear Ms. Bielstein:

The Edison Electric Institute (EEI) appreciates the opportunity to comment on the Financial Accounting Standards Board's (FASB or the Board) Exposure Draft of proposed Statement of Financial Accounting Standards (SFAS), *Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans — an amendment of FASB Statements No. 87, 88, 106, and 132(R)*.

EEI is the association of the United States shareholder-owned electric companies, international affiliates and industry associates worldwide. Our U.S. members serve 97 percent of ultimate customers in the shareholder owned segment of the industry, and 71 percent of ultimate electric utility customers in the nation. They generate almost 60 percent of the electricity produced by United States electric generators.

We support the Board's objective of improving transparency for financial reporting and agree with its objective of improving the understandability and representational faithfulness of amounts reported on the balance sheet. We also recognize the challenges inherent in developing a standard that accomplishes those objectives. While we welcome the Board's effort to achieve its objectives, we have serious concerns about the significant financial statement changes and the implementation timing proposed in this Exposure Draft.

Ms. Suzanne Bielstein
May 31, 2006
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We are concerned that the proposed changes presuppose outcomes in the Board's more comprehensive reconsideration of measurement and recognition issues slated for the second phase of this project. The changes in accounting prescribed in the current Exposure Draft could be overturned by conclusions in the second phase. This would lead to a second revision of financial statements, the doubling of implementation costs and added confusion for the users of the financial statements. For these reasons, we strongly recommend that the pension project be a **single comprehensive project** that addresses all desired objectives and not a two-phase project as proposed. As we will discuss further below, there are key issues that would be more appropriately addressed in a single comprehensive project.

We understand that the Board does not, and should not, take policy issues into consideration when determining appropriate accounting. However, the concept of "neutrality" as discussed in Statement of Financial Accounting Concepts No. 2, *Qualitative Characteristics of Accounting Information*¹, implies that the Board will have completed the steps necessary to ensure that proposed changes in accounting are supported by the conceptual framework and enhance the relevance, reliability and representational faithfulness of the financial information presented. For example, the Board is proposing a change in the measurement of the balance sheet liability but will not address which method of measurement is most appropriate until the second phase of the project. This approach could lead to unwarranted management decisions regarding funding, investment and plan design that would be dramatically different following the outcomes of a second phase, resulting in confusion and complexity rather than clarity and transparency. We recognize the importance of providing accurate, transparent and timely information to financial statement users; however, until the measurement and recognition issues are fully deliberated and resolved in a single comprehensive project, we believe any changes would be premature and would not benefit investors, creditors or the financial community.

Projected Benefit Obligation (PBO) vs. Accumulated Benefit Obligation (ABO)

Use of the PBO to measure a company's over- or underfunded status at the balance sheet date is inconsistent with other Board standards and does not meet the definition of a liability as discussed in Statement of Financial Accounting Concepts No. 6, *Elements of Financial Statements* (Concept 6).

¹ See Statement of Financial Accounting Concepts No. 2, paragraphs 98 and 100

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In its proposed standard entitled *Fair Value Measurements*, the Board defines fair value as "the price that would be received for an asset or paid to transfer a liability in a transaction between market participants at the measurement date." That definition of fair value is consistent with the discussion of fair value in Statement Nos. 133² and 143³ in that fair value represents a value at the measurement date (or in this case the balance sheet date). The ABO appears to be a more appropriate measure of the obligation than the PBO because it represents a value at a current point in time that could be settled between parties. As an example, annuity contracts based on the ABO could be purchased to settle a pension liability but an insurer would not undertake an obligation to settle a pension liability contingent on future actions by the employer (i.e., the PBO).

In addition, the PBO does not satisfy the criteria for recognition of a liability. As discussed in paragraph 36 of Concept 6, a liability has three essential characteristics: (a) it embodies a present duty or responsibility to one or more other entities that entails settlement by probable future transfer or use of assets at a specified or determinable date, on occurrence of a specified event, or on demand, (b) the duty or responsibility obligates a particular entity, leaving it little or no discretion to avoid the future sacrifice, and (c) the transaction or other event obligating the entity has already happened. With respect to criterion (a), an employer's present duty is to provide retirement benefits up to the ABO amount because that is the *earned* portion of the retirement benefits at the balance sheet date. With respect to criterion (b), employers can unilaterally cancel the portion of the plan related to future compensation levels. With respect to criterion (c), the events (i.e., pay increase and service to the company) have not occurred and may not occur unless the employer chooses to grant such an increase to the employee and the employee remains with the company. Using an example from the planned major maintenance project, the FASB and the Securities and Exchange Commission (SEC) have preliminarily agreed to eliminate the accrue-in-advance method for planned major maintenance. Both bodies acknowledged that the accrue-in-advance method does not meet the Concept 6 definition of a liability. In a letter from the SEC to the Accounting Standards Executive Committee of the American Institute of Certified Public Accountants, the SEC has stated that "the staff believes that it is inappropriate to

² Statement No. 133, Appendix F, Definition of fair value - The amount at which an asset (liability) could be bought (incurred) or sold (settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale.

³ Statement No. 143, paragraph B32 - Consequently, in its deliberations leading to the revised Exposure Draft, the Board concluded that the objective for the initial measurement of a liability for an asset retirement obligation is fair value, which is the amount that an entity would be required to pay in an active market to settle the asset retirement obligation in a current transaction in circumstances other than a forced settlement. In that context, fair value represents the amount that a willing third party of comparable credit standing would demand and could expect to receive to assume all of the duties, uncertainties, and risks inherent in the entity's obligation

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apply the 'accrue-in-advance' method and recognize a liability for the *future costs* expected to be incurred in connection with the next planned major maintenance activity." Similarly, using the PBO would recognize a liability for *future costs* that may be incurred, with such costs not fully complying with the current definition of a liability. In addition, unlike some planned costs for a major maintenance activity, there is generally no contractual obligation for future salary increases — the employer/employee arrangement is "at will."

However, recognition using the ABO is a reasonable extension of accounting under SFAS No. 87, *Employers' Accounting for Pensions*. In accordance with Statement 87, the excess, if any, of the value of the ABO above the fair value of the pension assets is recognized on the balance sheet. Using this measure to recognize amounts on the balance sheet would be a natural extension of current practice and be consistent with the Concept No. 6 definition of a liability in that the ABO represents an entity's obligation to provide benefits based on compensation levels and years of service up to the reporting date.

Similar to the PBO, the accumulated postretirement benefit obligations (APBO) does not represent the current fair value of the liability for other postemployment benefits (OPEB) as of the balance sheet date. There is no equivalent to the ABO measure for OPEB. The FASB should not default to the APBO simply because of the absence of a better measure to record pension liability amounts in the financial statements.

Balance Sheet Recognition of Funded Status and Unrecognized Costs

The public policy issue relative to pension and other postretirement plans is focused on the level of underfunding relative to the PBO and the APBO. With the required pension and OPEB disclosure, Congress and the general public may be under the impression that these amounts represent the current fair value of the benefit obligations, yet as noted above, there is overwhelming evidence to suggest that these are not the best measures of a company's current obligations. The accounting relative to funded status should be based on the correct measurement and recognition of the pension and OPEB obligations. The issue of underfunded pension and OPEB plans is not an accounting issue.

The central accounting issue that needs to be addressed relates to unrecognized costs. The proposed standard would require two companies, with equal amounts of unrecognized costs but with different levels of plan funding to recognize the same charges to equity for the unrecognized amounts. Because the unrecognized amounts assume the PBO and the APBO are the correct measures of the benefit obligations, companies will charge equity for costs that

Ms. Suzanne Bielstein
May 31, 2006
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have not been incurred. The value of the benefit obligations determines the amount of unrecognized costs. The level of unrecognized costs varies based on plan changes, assumption changes and asset performance. Prematurely setting the PBO and APBO as the appropriate measures of benefit obligations in the first phase of this project will not encourage companies to fully fund their plans but will encourage them to reduce plan benefits. This action may be taken to avoid or reduce the equity charge that would be incurred upon implementation.

Costs versus Benefits

It is true that the cost to gather the necessary information to comply with the proposed standard is not significant in most cases; however, we do not believe that the benefits of the proposed standard outweigh all of the costs. The Board has not addressed the incremental indirect costs that would result from implementation of the Exposure Draft and not all of those costs would be one-time charges. Such costs could include legal fees to negotiate and amend contracts or agreements that rely on certain financial information that would be affected by the proposed statement; increased financing costs and fees for compliance with contracts and agreements due to the accounting changes (e.g., a company's interest rate might increase because, as a result of a lower equity balance the company would be considered more risky than before the adoption of changes); and for a rate-regulated company, the additional costs to update rate structures within each jurisdiction in which it operates. In the absence of updating the regulated rate structures within each jurisdiction, the reduction in equity could result in lower allowed earnings in some cases where allowed earnings are based on return on equity calculations.

With respect to the benefits, the FASB has indicated that one of the chief results from this proposed standard would be improved clarity about the funded status of a company's pension plans. As discussed previously, the proposed standard would not necessarily provide that clarity and could in fact prove to be more confusing. In addition, this is a two-phase project that will in effect double the costs (examples of those costs are discussed above) to implement changes and add to the confusion through a second revision of financial statements. Given this lack of clarity in combination with the direct and indirect incremental costs described above, the benefits of the proposed standard do not outweigh the costs of implementation.

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Elimination of Early Measurement Date

Eliminating a company's ability to use a measurement date that is earlier than its company's fiscal year end could impair the company's ability to prepare accurate financial statements on a timely basis. The Exposure Draft proposes eliminating the provisions of SFAS 87 and SFAS 106, *Employers' Accounting for Postretirement Benefits Other Than Pensions*, that allow a company to measure and report plan assets and benefit obligations as of a date not more than three months prior to the company's fiscal year end. While it may conceptually appear desirable to use the fiscal year end as the measurement date, we strongly believe that practical considerations outweigh the perceived benefits. The early measurement date serves to facilitate the process of gathering reliable information and evaluating the results for fiscal year end reporting. The process of selecting assumptions, performing calculations and gathering and verifying information about the fair value of plan assets and the current measure of the benefit obligations is time consuming. An early measurement date allows the additional time that may be necessary to ensure that financial information relating to the pension and other postretirement benefit plans is reliable and accurately reflects transactions and events occurring during the measurement period.

Implementation Timing

Within the Exposure Draft's implementation timeline, rate-regulated entities would face significant challenges in implementing this proposed Standard while securing recovery through rates that would support recognition under SFAS No. 71, *Accounting for the Effects of Certain Types of Regulation*. As you are aware, rate-regulated entities recover their costs of providing service through rates approved by their state public service commissions. Considering the complexities of pension accounting and the due processes associated with rate changes to which all rate-regulated entities are subject, the proposed effective date for the new standard is impractical for rate-regulated companies. A longer implementation timeframe is needed to seek costs recovery in a regulated environment. As an illustration, the transition obligation is currently included in a rate-regulated entity's costs as part of its rate structure. Under the proposed standard this cost would be immediately charged to retained earnings, thus eliminating rate recovery unless an action by the regulator occurs. Regulators have certain processes that rate-regulated entities must follow in order to obtain specific accounting orders for items such as the proposed change in accounting for transition obligations. If the Board issues a final Statement late in 2006 and requires calendar year-end companies to implement it by the end of 2006, rate-regulated companies would not be provided adequate time to educate their regulators, and allow them to perform their due diligence and issue orders before

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the end of the year. Pending the outcomes of a second phase of this project, this entire due diligence process would be repeated with the regulators.

In conclusion, we support the Board's efforts. We agree that the current disclosure requirements could be improved. However, as indicated by our comments, there are several key issues that require further consideration that can only occur through a **single comprehensive project**. EEI appreciates the opportunity to respond to the proposed Statement. We hope that our comments will be helpful and look forward to working with the Board in the future.

Sincerely,

/ S /

David K. Owens
Executive Vice President
Business Operations

DKO:kk

CA-IR-134

Ref: T-9, page 109 (Pension Asset).

Beginning at line 14, HELCO T-9 states that HELCO has consistently included NPPC in all prior rate cases, since adoption of FAS87, and that "HELCO incorporated a negative NPPC of \$3 million in A&G expense" in the Company's 2000 rate cast test year. Please provide the following:

- a. Is the negative \$3 million gross or net of the allocation to capital accounts? Please explain.
- b. Referring to part (a) of this information request, please provide the total NPPC from the Company's 2000 rate case test year, showing allocation between expense and capital (and other billable) accounts.
- c. For each HELCO rate case test year since the adoption of FAS87, please identify each rate case docket and provide the total NPPC recognized in the forecast test year, showing allocation between expense and capital (and other billable) accounts.
- d. Please provide HELCO's allocation of the positive \$2.7 million total NPPC in the current rate case test year, between expense and capital (and other billable) accounts.

HELCO Response:

- a. The negative NPPC of \$3 million is gross, i.e. a portion of the negative \$3 million was allocated to construction work in progress and capitalized.
- b. The total PUC approved NPPC from the Company's 2000 test year rate case was a negative \$3,001,600. Of the total negative \$3,001,600, a test year estimate of negative \$1,015,500 was transferred to construction work in progress, and a test year estimate of negative \$32,500 was billed to third parties for HELCO services rendered. The remaining negative \$1,953,600 was included as part of Administrative and General Expenses (specifically as part of Employee Benefits Expense).
- c. The requested information is attached.
- d. Of the \$2,686,000 total NPPC in this instant docket, a test year estimate of \$831,000 (30.94% transfer percentage derived from HELCO-910 times \$2,686,000) is estimated to

be transferred to construction work in progress. The remaining \$1,855,000 is included as part of Administrative and General Expenses (specifically as part of Employee Benefits Expense). None of the \$2,686,000 transfer amount for test year 2006 was estimated to be billed to third parties for HELCO services rendered.

Hawaii Electric Light Company, Inc.
Employee Benefits Transferred
Based on Test Year Rebuttal Testimonies

Docket No.	Test Year	(\$Thousands)			
		Total NPPC	Expense	Capital	Billable
99-0207	2000	3,002	1,954	1,016	32
94-0140	1996	2,446	1,454	943	49
7764	1994	2,538	1,455	1,047	36
6999	1992	2,213	1,338	819	56
6432	1990	1,700	1,091	592	17

CA-IR-135

Ref: T-9, page 111 (Pension Asset).

At line 5, the referenced testimony states, in part: "From the standpoint of accounting theory, the prepaid pension asset was funded by investors. It is a fundamental principle of accounting that all assets must be funded either by debt or equity. Investors, not ratepayers, provide the funds for a corporation's debt and equity. When an asset is positive it necessarily means that with respect to total company costs the shareholders have contributed some surplus that needs to be recognized in rate base.... Ratepayers do not fund Company investments. Rather, they pay for services and those payments are recorded as revenues. Investor funds are used to fund the pension plan just as investor funds are used to construct or purchase the gross plant assets." Please provide the following:

- a. Please provide a copy of and pinpoint citation to the "fundamental principle of accounting" relied upon by HELCO T-9 that concludes that "all assets must be funded either by debt or equity."
- b. Please provide a copy of and pinpoint citation to the "accounting theory" relied upon by HELCO T-9 to conclude that only shareholders, and never ratepayers, provide funds to support rate base.
- c. Please explain the understanding of HELCO T-9 as to why rate base is reduced by the test year balance of accumulated depreciation reserves, accumulated deferred income tax reserves, customer deposits and customer advances.

HELCO Response:

- a. HELCO is not aware of a specific citation as the one described by this information request. The fundamental principle of accounting referred to in the Company's testimony is the basic accounting equation that Assets minus Liabilities equals Stockholders' Equity. In the case of HELCO, as is generally true with other electric utilities, the equation is slightly different, i.e. it is Assets minus Liabilities equals Capitalization. Capitalization is comprised of long-term debt (net of amounts due within one year), preferred stock not subject to mandatory redemption and common stock equity. In this context, all assets (net of related liabilities, if any) are funded by debt or equity, i.e. are funded by investors.

- b. See response to part a.
- c. HELCO T-16 explains why accumulated depreciation is deducted from the original cost of assets in the calculation of rate base (see page 4 of HELCO T-16). The reason for deducting unamortized contributions in aid of construction, customer advances for construction, customer deposits and accumulated deferred income taxes in the calculation of rate base is explained on page 30 of HELCO T-16.

CA-IR-136

Ref: T-9, page 111 (Pension Asset).

At lines 11-17, the referenced testimony states, in part: "Ratepayers do not fund Company investments. Rather, they pay for services and those payments are recorded as revenues. Investor funds are used to fund the pension plan just as investor funds are used to construct or purchase the gross plant assets. Investors contributed \$33.6 million to the pension plan for the period 1987 to 2005 (see HELCO-920)." Please provide the following:

- a. Please provide a copy of any investor checks or wire transfer confirmations associated the \$33.6 million contributed to HELCO's pension fund by its investors. If none, please so state.
- b. Please identify each debt or equity issuance used to obtain the funds necessary to contribute \$33.6 million to HELCO's pension fund. If none, please so state.

HELCO Response:

- a. There are no investor checks or wire transfer confirmations associated with the \$33.6 million contributed to HELCO's pension fund. The absence of such documents does not mean that investors did not supply the funds used to make the contributions. In general, businesses do not normally track cash receipts and disbursements in a way that allows them to prove the specific source of each cash disbursement amount, and such tracking is not generally required for business operations as a whole. HELCO does not generally track cash as such. To do so would cause HELCO to incur unnecessary costs with no apparent benefit, which would not be in the best interests of the Company and ratepayers.

HELCO T-9, beginning on line 4 of page 111, is accurate. The testimony states in part that ratepayers pay for services and those payments are recorded as revenues.

Investor funds are used to fund the pension plan just as investor funds are used to construct or purchase the gross plant assets. See also HELCO's response to CA-IR-135.

- b. HELCO does not track cash receipts and disbursements in a way that allows it to track the specific source of each cash disbursement amount. HELCO cannot identify the specific debt or equity issuance that was the source of funds for each of its contributions to its pension fund, but that does not mean investors did not provide the funds for the contributions. See HELCO's response to part a. above.

CA-IR-137

Ref: T-9, pages 119 (Abandoned Capital Projects).

At line 19 of page 119, HELCO T-9 indicates that the Company might seek HPUC approval for special accounting and ratemaking treatment if unusual circumstances exist with regard to an abandoned capital project. Please provide the following:

- a. Please identify describe the types of circumstances that HELCO would consider sufficiently unusual that could lead to a request for HPUC approval for special accounting and ratemaking treatment.
- b. Would the response to part (a) of this information request be different if the unusual circumstances applied to an abandoned project that became known: (i) between rate cases or (ii) during the processing of a rate case? Please explain.
- c. During the past ten years, please identify each abandoned project and the related HPUC proceeding in which HELCO sought specific approval for special accounting and ratemaking treatment.

HELCO Response:

- a. Identifying the circumstances under which HELCO would seek Commission approval for special accounting and ratemaking treatment with respect to the costs of an abandoned project would be a hypothetical discussion. HELCO would make the decision to seek Commission approval based on the specific facts and circumstances of each situation. Having said that, HELCO may consider such a request in situations including, but not limited to where the abandoned project costs are significant, where appropriate cost recovery would not otherwise occur and/or where the Company's financial condition would be significantly and negatively impacted without special accounting and ratemaking treatment.
- b. HELCO is not sure it understands this question. Having said that, HELCO does not anticipate that its response to part a. would be different based on the timing of the project abandonment. HELCO's interest would be to obtain appropriate cost recovery. Rate

case test year amounts are designed to reflect normal conditions, whereas the request for special ratemaking and accounting treatment would be made under unusual circumstances. Therefore, if the project abandonment became known during the processing of a rate case, HELCO does not anticipate, for example, that it would recommend including the entire write-off amount in the test year estimates, but would rather recommend some type of normalized amount for inclusion in the test year estimates.

- c. During the past ten years, HELCO did not seek Commission approval for special accounting and ratemaking treatment with respect to the costs of an abandoned capital project.

CA-IR-138

Ref: T-9, page 120, & HELCO-923 (Abandoned Capital Projects).

HELCO-923 shows the calculation of the six-year average of abandoned projects included in the 2006 test year forecast. HELCO-923 identifies the amount of annual abandoned projects by work order/project number. Over the years, these work order/project numbers have six (6) of observations that exceed \$90,000. Please provide the following:

- a. For each of the six observations in excess of \$90,000, please provide a detailed listing of each abandoned project and related amounts.
- b. Referring to the response to part (a) of this information request, please identify each item for which HELCO sought HPUC approval for special accounting or ratemaking treatment, if any.
- c. Please explain why there were no abandoned capital projects in 2000 or 2002.

HELCO Response:

- a. HELCO noted that only five observations were in excess of \$90,000. Detailed listings for the five observations are attached on pages 3 – 12 of this response.
- b. HELCO did not seek Commission approval for special accounting or ratemaking treatment with respect to any of the abandoned projects identified in HELCO's response to part a. above.
- c. With respect to the year 2000, capital projects abandoned during the year did not result in direct write-offs to operation and maintenance expense. The current treatment of costs with respect to abandoned capital projects resulted from an agreement between HELCO and the Consumer Advocate entered into as part of HELCO's test year 2000 rate case. The Commission's Decision and Order in that rate case, i.e. D&O No. 18365, Docket No. 99-0207, which approved the agreement between HELCO and the Consumer Advocate with respect to the treatment of abandoned capital project costs, was filed on February 8, 2001.

With respect to 2002, HELCO's research indicates that there were abandoned project costs which should have been written off to operation and maintenance expense. However, the costs were erroneously charged to the Customer Engineering on-cost (clearing) account and capitalized. The total amount that should have been written off is approximately \$111,900. A listing of the projects that were abandoned and the work order numbers that should have been charged with the cost write-offs is attached on pages 13 – 15 of this response.

Total transferred to EE021418 in 2001
(\$219,588)

Work Order #	Work Order Description	Amount
EE000554	STEELE, CAROLYN ADAM LE	2,698.84
EE000653	CH DWS MAUKA KAUMANA	637.02
EE000654	CH DWS Mauna Kaumana	1,763.66
EE000877	FLEMMING, DENNIS/JUDY	4,749.90
EE001283	CH DWS KEONEPOKO IKI	50.36
EE001856	Laupahoehoe Seacliff LE	8,692.65
EE002372	SSPP Unit 627-Henry (Design)	4,125.70
EE003429	Kelly, Audrey (SSPP)	2,894.72
EE004662	Lang, Guido LE	3,131.66
EE005283	McGuire, John	1,000.23
EE008087	Jacobs, Jacquelyn SSPP LE	3,956.10
EE008833	GREAT EXPORTATIONS-HAWAII	158.32
EE009720	McKeen, Robert C	100.89
EE010130	WILKINSON, TOM	2,097.41
EE010189	MAFFIT, WARREN O	103.38
EE010277	Warren O. Maffit - Tsf. Inst. Desig	385.85
EE010383	Nielsen, Gregory & Cinnamon	86.44
EE010747	CALIFORNIA & HAWAII FOLIAGE	4,070.42
EE010996	Mills, Neil F	491.70
EE011234	BRADLEY, MARY/JAMES	952.44
EE011293	Peterson, Chris A	1,620.45
EE011823	Gifford, Colleen	6,130.27
EE012206	Nielsen, Gregory & Cinnamon-Transformer	510.75
EE012297	Moran, Kelly	3,241.97
EE012335	NASH, LEM W	164.83
EE012392	FRANCIS, JOHN	242.69
EE012842	Alani, Joylinda N	3,450.41
EE012893	CH Traffic Sgnis Upgrd Various	521.08
EE012894	CH Traffic Sgnis Upgrd Various	676.14
EE013370	Parks, Boyington J (Ag Bldg)	178.22
EE013387	Parks, Boyington J (LE)	2,903.90
EE013402	Dacuyucuy, Bronson (LE)	1,985.84
EE013648	WILSON, STEPHANY A	1,499.81
EE013672	Reimer, Brian	1,683.71
EE013885	Petrie, Joseph LE	1,354.78
EE014072	Burns, Thomas D LE	6,705.93
EE014362	Godfrey, Cheryl LE-D	3,684.16
EE014576	HOCH, HANNELORE & ASCHE, M	301.32
EE014660	Culp, Celia E SSPP #615 LE	4,250.63
EE014667	Island Training Center	2,087.28
EE014936	SHELBY, KELLY	432.83
EE015166	MAMCZARZ, MICHAEL	102.73
EE015860	Puna Rock Co	6,002.94
EE016013	TSAI, GRACE	3,075.83
EE016258	Morse, Gordon	770.97
EE016310	Voice Stream	5,144.80
EE016417	Gehweiler, Thomas	227.89
EE016609	FELTON, MARK J - TSF-D	285.07
EE016621	TRAN, FRANK	200.12
EE016787	Holland, George (LE)	1,764.51
EE016820	Gilman, Dante P	1,873.15
EE016945	Kaawa III, David H & Madeline	9,839.14
EE016967	Smith, Michael L & Janice E	424.57
EE017000	Giusti, Jessica M SVC-D	200.12
EE017133	GIUSTI, JESSICA M TSF-D	747.19
EE017260	Gilman, Dante P	319.90
EE017445	Harvey, Terry & Cindy LE-D	2,174.14
EE017627	Grogg, Danny	200.12
EE017680	Grogg, Danny - TSF-D	570.57
EE017692	DEREGO, LOUIS	102.73
EE017809	Yoes, Peter	443.72
EE017818	Dick Pacific (Pukihae Bridge)	175.24

Total transferred to EE021418 in 2001 (cont)

Work Order #	Work Order Description	Amount
EE017975	Guild, Robert W	3,031.07
EE018067	Ayers, Joseph & Lora	8,015.33
EE018321	Development Inc	2,059.18
EE018596	Cook, Joseph Anthony (LE)	2,403.84
EE018650	Belhumeur, Robert LE	2,628.05
EE018803	CASTAING, MARCUS	271.97
EE018853	Chang, Eric R	2,540.79
EE018971	Shimamoto, Robert M	252.01
EE018998	Timasas, Silveria (MS)	5,411.88
EE019166	OBRIEN, KARYN M - TSF-D	1,289.50
EE019271	Bray, John	832.03
EE019566	Lapinta, Joel K	1,894.66
EE019569	Todoroki, Roy	1,355.66
EE019572	GIBBS, FRED C	1,650.06
EE019601	Tower, Joe	383.44
EE019666	Anderson, Eric L	1,296.70
EE020041	Hirota, Rudy	2,168.25
EE020330	McCully Subdivision	5,419.65
EE020331	Keanahalulu at Glenwood	3,321.37
EE020400	Robinson, Keaka	674.36
EE020401	Momsen, Bob	842.35
EE020445	Tower, Joe - Secondary	1,268.66
EE020492	Alexander, Albert & Annette	312.13
EE020527	Cimino, Steven (SSPP LE)	599.21
EE020651	Halpern, Pat R LE	1,481.07
EE020784	Sawmill Hawaii LLC	1,014.74
EE020856	BERNARD, ALVIN	1,903.89
EE020934	Alna Lea Goff Res Community	8,199.14
EE021136	SH Kaaau Elm/Intr School	3,231.21
EE021305	Kitagawa I & Co Ltd SVC-D	569.74
EE021328	Germain, Shaen C TSF-D	720.60
EE021390	FREITAS, CLARENCE J TSF-D	852.05
EE021397	Schultz, Richard & Dellowyn-Transformer	578.15
EE021581	Joyce, Kenneth C	493.44
EE021588	Olds, Samie E	1,319.28
EE021692	WEINBERG, SCOTT V LE	297.80
EE021694	Matsumura, Donn & Terri	147.15
EE021746	Pomroy, Melvin L	224.21
EE022129	Lung, Doug (OH to UG)	1,308.69
EE022375	BORDER, FRED LOUIS LE	221.93
EE022633	Adam Fenenbock - Transf Install	455.92
EE022786	LONG, CAROL C LE	592.21
EE022908	RPR Kau (Kaneshiro)	400.00
EE022957	Osbourne, Jeffrey W (SSPP LE)	4,340.44
EE022975	Hawaiian Cablevision of Hilo	366.60
EE023129	Biggs, Gloria	2,291.50
EE023197	Vandervoort, Debra	974.05
EE023556	Hawaiian Natural Water Co Inc	764.70
EE024137	Flores, Phillip	445.00
EE024254	Miller, Denise M LE	220.81
EE024936	Kurtistown Jodo Mission LE-D	447.28
EE025486	Wilson, Barbara	935.12
EE025500	Henderson, Gerl D/R	73.32
EE025522	Roscoe, Steve	301.24
EE025717	Carol, Joan & Depwe, Jan - LE	2,482.99
EE025754	Puna Rock SVC	2,367.90
EE025755	Puna Rock SVC	1,183.95
EE026537	Machado, John	73.32
EE026675	Paauiilo Shaft Well (LE)	2,250.89
EE026676	PAAUIILO SHAFT WELL - INSTALL UG SVC	1,798.17
EE027082	Souza, Richard E (LE)	440.48
EE028196	Christopher, Leigh LE-D	1,777.13
Total transferred to EE021418 in 2001		<u>219,588.40</u>

Total transferred to EE021416 in 2003 (\$103,569)

Work Order #	Work Order Description	Amount
EE003224	transfer upgrade com svc-UG to clearing	4,903.95
EE003226	transfer new distr factl-OH to clearing	81,088.42
EE008084	Ahualoa Conv Ph 1 - Prel Eng *	5,318.15
WH302100	Coll Eng Pohakuloa Conversion From Delta *	2,483.89
WH353100	COLL ENG MAMANE ST HONOKAA RPLC ROT POLE	465.74
WH688100	Coll Eng RPR Ahualoa Conv *	9,311.23
Total transferred to EE021416 in 2003		<u>103,568.38</u>

Work Order #	Work Order Description	Amount
Total transferred to EE021418 in 2004		(\$168,522)
EE005566	WAIKOLOA VILL S/D UNIT 2A2 PH2	17,974.63
EE005567	WAIKOLOA VILL S/D UNIT 2A2 PH3	11,286.91
EE005649	SHIZURU JR, JASON T LE-D	4,087.93
EE006205	ICO SUPPLY	4,105.08
EE006206	COHEN, QUINTIN	163.10
EE006333	COHEN, QUINTIN	2,071.39
EE006796	RPR P414 6200 Line - Install	72.54
EE007722	SH DOH RES CHILDREN FAC HILO	4,722.35
EE008087	JACOBS, JACQUELYN SSPP LE	15.29
EE009484	WAIKOLOA VILL UNIT 2A2 PH1B	15,498.35
EE010404	YATES, ALFRED/MIVIAN	401.45
EE010406	YATES, ALFRED/MIVIAN LE-D	717.00
EE011359	LAURANCE, ROBERT E	209.97
EE012410	RPR P330 6200 Line - Install	4,139.14
EE012500	MOODY, ROBERT R LE	2,298.51
EE013414	RAYMOND MARC D	1,432.65
EE013588	PARKER RANCH CENTER PH2 (OH)	15,850.26
EE014362	GODFREY, CHERYL LE-D	2.81
EE014730	MATSUDA SUBDIVISION	1,419.30
EE016784	ELEK, JANINE	3,540.49
EE018658	VIENNA, JASON A SSPP LE	8,138.42
EE020488	YAMADA, HARUO & UTAKO	892.91
EE021820	NAHA, NORMAN W LE	604.44
EE022831	HA, CHRISTINE LE	1,288.98
EE023049	KNIGHT, DOUGLAS/DARCIE	1,584.77
EE023446	OXLEY, ANN L SSPP LE	3,826.58
EE023591	Pomroy, Melvin - Transformer	873.70
EE025487	STEIN, ARDIE (MS)	6,013.90
EE025486	WILSON, BARBARA	3.61
EE025596	BEARDSLEY, DAVID	1,523.19
EE025941	OLSON, JIM LE	308.05
EE025991	FURTADO, JACK	1,423.69
EE026265	TAMURA, KAZUO LE-D	1,158.08
EE026571	KUKIO BAY BEACH CLUB PH1 OH Riser	673.75
EE026894	POMROY, MELVIN L LE	1,454.62
EE029678	MALLARY, RICHARD W & NANCY SVC-D	157.62
EE030344	MALLARY, RICHARD W & NANCY L	384.05
EE030847	CAHILL-ACHEE, NATALIE	157.62
EE030831	FULTON, WILLIAM (LE)	3,008.13
EE031006	HALPERN, CASEY G LE	662.45
EE031311	KELA, COLLEEN - RELOC LE	1.55
EE031529	DEPWE, JOAN CAROL & JAN (LE)	1,125.65
EE031534	KAEKA, DANIEL (SSPP LE)	1,270.28
EE031552	ELLIOTT, AGUSTUS - LE	657.41
EE031940	BROOKSTONE TELECOM INC LE	1,709.12
EE032785	JABLONSKI, DENNIS LE	1,328.00
EE032872	PRATT, DEAN (SSPP LE)	982.98
EE033497	WEICH, DUSTY R LE	826.99
EE034643	Pacheco, Andrew - L.E.-D	2,811.45
EE035049	SH PUAINAKO ST WIDENING	1,042.70
EE035790	VOICE STREAM-NAALEHU LE UPGR	2,480.41
EE038834	Kamahahele, Ulrich - LE-D	672.61
EE039921	ALBRECHT, DONALD LE UPGR	604.21
EE040114	KUKIO KUA'AU COTTAGES 20-30 LE	6,137.09
EE041129	STEWART, ERIC (LE)	520.72
EE043216	JASINSKI, JOHN (LE)	85.15
EE043242	Prelim Materials Ku'a Au Cottages	755.18
EE043286	GREENHALGH, WILLIAM H LE	923.14
EE043605	CHAPIN, EDWARD L (LE)	876.65

EE043667	RIVERA, ALBERTA (LE)	84.03
EE043902	ARNOLD, DOMINIQUE & JULIET LE	594.91
EE044296	KENNEDY, JANA (LE)	424.40
	Total transferred to EE021418 in 2004 (cont.)	
Work Order #	Work Order Description	Amount
EE044895	LAW, TIMOTHY (LE)	239.65
EE045024	RPL SEC KOMOHANA GARDENS - I	2,222.54
EE048455	INMAN, DUTCH (LE)	1,054.21
EE048519	SMALLWOOD, MICHAEL A LE RELOC	6.76
EE047209	KAILUA SS RELOC CAP BNK 2 - I (INSP	2,081.05
EE048475	GREENHALGH, WILLIAM H LE	2,703.85
EE049905	THERRIEN, MARK LE RELOC	2,652.13
EE051862	SH DOT HIGHWAYS LE RELOC	288.69
EE051949	HOOVER, EVE (SSPP LE)	1,055.50
EE052258	ISAGAWA, SHANE K LE RELOC	196.43
EE053987	MALULANI INC	1,375.55
EE054888	BARBATI, RICK SVC - D	386.54
EE056210	EVANS, DANIEL R LE	1,337.01
EE058508	HERZOG, MARKUS LE RELOC	1,258.76
EE058523	GIEL, RICHARD A & SANDRA A	603.08
EE059437	KAMIMURA, FRANK S (LE)	192.58
TD000385	Install-replace rot p11 & p15 papaikou	131.57
TD000376	replace rotten p36-2 papaikou	232.61
TD000446	Install P-7 Papaikou	87.73
TD000527	replace rotten p46-2 Huina Rd	87.73
TD002963	P1L Wright Rd Volc-Repl anc	275.36
	Total transferred to EE021418 in 2004	168,521.68

Total transferred to EE021418 in 2005 (\$152,738)		
Work Order #	Work Order Description	Amount
EE005176	Prevent Distr Poles - Remove	100.78
EE006797	RPR P414 6200 Line - Remove	12.48
EE022425	AINA LEA GOLF RES COMM ONSITE	3,114.11
EE022485	HINAU, GLADYS E	146.64
EE022628	Gladys Hinau - Transf Install	597.71
EE022966	HAINES, HAROLYN	146.64
EE025483	NORRID, JIM D SVC AINALOA	146.64
EE026003	YAGONG, DOMINIC LE	35,389.49
EE028232	AKAKA FALLS INN (SVC)	331.22
EE028761	BRILHANTE-HAWAII LE	9,757.52
EE028878	MEEKS, MAKAILA L SVC-D	280.36
EE029140	ROYAL, WAYNE (SVC)	280.36
EE030072	NORTHEY, JAMES & KARALA - LE	449.62
EE030926	STEARNS RICHARD C SVC	157.62
EE032857	JOHN M (LE) FINAL - D	3,867.51
EE033216	SCHMIDT, HENRY W S/D	7,086.95
EE033820	KING LAULAU BRAND POI (UPG)	313.26
EE035845	VOICE STREAM-OOKALA SVC	2,871.63
EE037299	KING LAULAU BRAND POI LE	997.83
EE037687	COLONY AT MAUNA LANI PH 1 (LE)	303.55
EE038317	MACKAY, DOUGLAS LE RELOC	198.68
EE038537	PAAUILO MAUKA KALOPA COMM ASSC	378.51
EE038272	ROBERTS CENTRAL (SVC) - D	295.53
EE042987	SH DOT HARBORS DIV-PIER 1 SHED	356.14
EE044204	HONOKAA KNOLLS APARTMENTS	914.63
EE044855	AINA LEA GOLF RES COMM OFFSITE	16,801.16
EE051153	AHUALOA CONV. PH-1 (ENG)	6,512.62
EE054423	MAEBO NOODLE FACTORY LE	513.17
EE055594	puueo h-frame (eng)	2,165.21
EE055650	RACINE, MARK (RLOC) - D	780.06
EE055931	CAMACHO MD, DR BRENDA S	397.37
EE056070	RACINE, MARK (RLOC) - I	2,073.91
EE057150	BAHURINSKY, MORGEN (SVC LE)	284.34
EE057628	Design UG -20 Kilae Subdivision	174.31
EE058050	SH DLNR MANA QUARRY	2,138.73
EE058584	SH DOT ADA COMPLIANCE PROGRAM	4,315.10
EE058875	MYRIANTHIS, NICOLAS (RELOC) - D	562.78
EE059201	GIEL, RICHARD A & SANDRA D (SVC) - D	597.19
EE061249	YOZA, ALLAN M SSP LE	77.92
EE061791	DAMBROSIO, DOUGLAS A LE	180.48
EE062351	JORDAN, SEAN M LE	1,934.97
EE063667	Prelim Materials China US Center	15,495.77
EE064335	IRVIN, EVELYN C (LE)	691.29
EE065352	US PBA RESEARCH CNTR PH1 TEMP	2,562.56
EE065417	PUNA CERTIFIED NURSERY LE	3,748.18
EE066589	WISHARD, STEVEN LE RELOC	261.30
EE069394	KAHAOPEA GARDENS S/D	409.30
EE071286	SATTERFIELD, MITCH LE	225.43
EE075515	GRUNE, RICHARD - TSF - D	352.08
EE075517	GRUNE, RICHARD - TSF - I	18.55
TD000060	replace cutout p41 todd ave.	266.37
TD000348	REPLACE ROTTEN P9,26X,831 AINAOLA	154.54
TD000443	REPLACE ROTTEN P6-2 WAIMALINO LN.	153.00
TD000444	REPLACE ROTTEN P# & P4 AIKANE LP	242.92
TD000445	REPLACE ROTTEN P2 PAPAIIKOU	149.74
TD000447	Replace Rotten P.4/30 & P.5/32 Puueopaku	149.74
TD000500	replace rotten p234 pahoa town	157.09
TD000501	replace rotten p220-1 pahoa town	149.85
TD000547	replace rotten p25 tropical hi. prod.	149.48

TD000563	replace rotten p1 keeau town intersec	149.85
TD001633	ROT P13 LEHUA ST HONOKAA	140.95
TD001634	rot p12 lehua st honokaa	140.95
	Total transferred to EE021418 in 2005 (con't.)	
Work Order #	Work Order Description	Amount
TD002794	ookala radio sta line repairs	138.97
TD011159	RPL P-17 NO PECK ROAD-D	1,551.50
TD012508	RPL P-26 PEPEEKEO MILL RD - D	503.81
TD013120	rot p12 lehua st honokaa	548.20
TD013123	Rpl P51-1 Manono St rotten serv pole.-D	143.72
TD013455	RPL P2-3 OHANAKUPA RD	1,090.40
TD013983	Rpl Pole 147 Mikhala St-D	150.00
TD014908	RPL P32-G 7600 LINE-D	355.60
TD015805	Check on responsibility of sec conduit-D	597.35
TD015838	ACC RPR P20 AINAOLA DR - D	2.25
TD020251	RPL P4 KIAKAHI -D	8,824.37
WI073100	RPR KOHALA (WRO#84) - COLL ENGR	8,102.16
WI485100	COLL ENG RPLC SUBSTNDRD HANDHOLE KUMUKOA	293.63
WI689100	COLL ENG HILO MOTORS KIL AVE FIX CUSTOME	370.12
WI928100	COLL ENG-BALDWIN SVC RELOCATION KAL AVE	291.95
	Total transferred to EE021418 in 2005	152,737.70

Work Order #	Work Order Description	Amount
Total transferred to EE021419 In 2005 (\$98,271)		
EE000175	KANAI, RONALD RELOCATION	338.81
EE000176	KANAI, RONALD RELOCATION	30.99
EE002201	RPR KONA	1,288.06
EE002369	Brunner Road -Reloc Exist OH Lines-Engin	1,311.94
EE002429	RPR KONA (WODEHOUSE RCH.)	236.78
EE002884	RPL Kona P-365X Palani Rd.-D	353.26
EE003306	CHAMBERLAIN, LEO	874.08
EE003831	KUKAHIKO, BILL	986.35
EE005140	MCCRACKEN, ARTHUR	1,468.29
EE007515	KUNITAKE, WALTER	490.84
EE008037	RPR HTCO JP96-248	574.32
EE013547	SPIES, JONATHAN	238.52
EE013783	SPIES, JONATHAN	744.08
EE017358	HOKULIA PHASE II	55.93
EE020438	JONATHAN SPIES - INSP	2,482.68
EE022189	LAIOPUAWAIMEA FIBER OPTICS	2,157.66
EE023255	ORCHIDS @ MAUNA LANI COGENR PT	918.34
EE028382	MANN, STEPHEN (LE)	7.94
EE029684	RPL Kohala-Guy Wires-KMR-D	1,221.14
EE031678	RPL Keokea Relocation-D	554.71
EE033282	METAL WORKS (SVC)	201.77
EE036106	WILSON, ALEXANDER (SVC)	153.44
EE036445	KEOPU AINA S/D	214.27
EE036691	ROBINSON, RICK (RLOC) - D	359.85
EE037030	Robinson, Rick - SVC-I	262.33
EE038068	CROUCH, MIKE (LE)	41.21
EE038392	WILSON, ALEXANDER (LE)	1,495.71
EE039772	ALOHA PLUS STORAGE - D	806.11
EE039949	BERINOBIS, RUTH (LE)	210.84
EE041589	DÉGUAIR, BERNARD (SVC)	706.23
EE041682	LOUIS, ANDREW (LE)	41.21
EE042352	JPT 95-164 mamalahoa hy,so kona	287.71
EE042858	ANDERS, MARSHALL (LE)	481.97
EE043802	CH DWS PUALANI WATER STORAGE	774.00
EE044417	BLACKMAN, HARRY (LE)	781.31
EE044462	ANDREE, DAVID (SVC)	187.77
EE045956	SPRINGS, MARK (LE)	649.94
EE046561	WONG, WILLIAM CPA (UPG)	256.69
EE046675	MCGUIRE, BOB (SVC)	80.76
EE047113	HOKULIA CLUBHOUSE & PROSHOP	281.84
EE047738	HOKULIA CLUBHOUSE/PROSHOP (LE)	308.69
EE047847	WALL, TERRY (LE)	2,154.96
EE048066	MARYL GROUP (SVC)	135.50
EE048569	PULLAN, IAN (SVC)	61.18
EE049219	CHURCH OF CHRIST (LE)	122.32
EE049571	DECKER, JAY & TIFFANY (SVC)	61.18
EE050528	ABOUD, SHELLEY (LE)	696.01
EE051225	CHANDLER, WILLIAM (LE)	177.30
EE052544	TERRACES AT KAHALUU BLDG 1	238.41
EE052546	TERRACES AT KAHALUU BLDG 2	102.92
EE052618	WAIKOLOA LAND CO (SVC)	540.10
EE052710	KONA LAGOON SPS IMPROVEMENTS	1,919.75
EE052864	IMMING, RODNEY (LE)	131.52
EE053180	VANA, PETER (LE)	4,528.16
EE053299	RABIN, ARNOLD (L/E)	45.89
EE053741	METAL WORKS (SVC)	50.79
EE054249	LONG, SANDRA (SVC)	85.89
EE054387	MALUHIA HALE LANI FARMS (SVC)	154.30
EE054786	BUCHOLZ, MARK	255.55

EE055450	KENNEY, JOHN (LE)	91.76
EE055684	STEWART, IRENE (LE)	542.45
EE055803	LEWIS, JORY (LE)	91.76
	Total transferred to EE021419 in 2005 (con't.)	
Work Order #	Work Order Description	Amount
EE055954	Design New Distr Facil-UG (-20K) (WK)	196.19
EE055959	HIBSCHER, JOHN (SVC)	45.89
EE056307	CALDWELL, CHARLES SSPP LE	2,104.72
EE056342	SOUTHARD, JIM (SVC LE)	91.76
EE057451	SH DLNR CONSERVATION EDUC FAC - D	1,628.28
EE057795	HENDERSON, PENN (LE)	460.33
EE058482	CENTEX DESTINATION RESORTS	3,051.79
EE058508	AUTRY, TRAVIS LE	999.52
EE058787	MERCIER, TYLER (LE)	45.89
EE059184	SAUER, WILLIAM (SVC)	597.79
EE059261	DENZER, STEPHEN (UPG)	91.76
EE059311	SHANNON, DENNIS (SVC)	105.87
EE059452	CENTEX DESTINATION (LE)	1,346.63
EE060086	HONOKOHAU PROPERTIES RD R-1 - D	2,313.49
EE060220	FRYAR, MONIQUE (SSPP LE)	1,849.92
EE060541	REED, RICHARD (SVC)	45.23
EE060557	RPL POLES AKONI-PULE HWY.-D	583.51
EE060669	HAINES, CLANCEY (SVC)	282.27
EE060727	WINTERSTROM, SARAH (SSPP LE)	2,218.20
EE060818	VERGONA, ANGONIA (SSPP LE)	2,616.07
EE061269	BOYD, DANIEL (LE)	1,128.95
EE061398	SULLIVAN, KEVIN (SVC)	1,895.83
EE062126	PIERSON, JACK (SVC)	236.79
EE062128	PIERSON, JACK (SVC)	135.93
EE062133	PIERSON, JACK (SVC)	135.93
EE062229	SENA, TOM (LE) - D	1,729.98
EE062413	DOLAN, PAUL (LE)	2,150.38
EE062653	KAMALANI OFFICE SITE (SVC)	4.54
EE063107	DRAUGHON, PHILIP (RLOC)	46.69
EE063792	BERNAERT, RENEE (SSPP LE)	1,307.39
EE064099	RANGER PACIFIC (LE)	183.43
EE064453	EDWARDS, ERIC (SSPP LE)	289.14
EE064470	WASHBURN, DEXTER (LE)	684.09
EE064573	NAKANO, DENNIS (LE)	400.95
EE064596	CH DWS PUALANI WATER STORAGE-INSP	35.48
EE064675	MATTHEWS, MIKE & JULIE (SVC)	690.90
EE064738	LANGENSTEIN (UPG)	187.36
EE065376	BOND, THAD (LE)	99.34
EE065443	TSAFOS, MATOULA (LE)	1,758.45
EE065769	RANGER PACIFIC INC (SVC)	135.69
EE066196	MILLS, JILL (SVC)	99.83
EE066198	MILLS, JILL (LE)	369.97
EE066230	RANUM, GEORGE (SSPP LE)	250.02
EE066398	COSKIE, JAY (SSPP LE)	234.87
EE066697	DELAO, ELIZABETH (LE)	45.23
EE066978	TURNBULL, CRAIG & TAMMY (LE)	1,029.69
EE066994	HENDERSON, PENN (SVC)	470.23
EE067584	SPENCER, ALLYN (SVC)	22.61
EE067689	TESHIMA, HAROLD (RLOC)-D	818.34
EE068084	NAKAMOTO, ROBERT (SVC)	22.58
EE068331	KOLEHOUSE, CLARENCE & BETTY	168.35
EE068819	DEGRAY, EARL (SSPP LE)	630.74
EE068896	HENRY, HAINRICH (SSPP LE)	1,617.97
EE069128	TESHIMA, HAROLD (RLOC)-I	3,948.04
EE069450	STONE, CYNTHIA (LE)	96.20
EE070163	SMITH, LARRY (SVC)	412.31

EE070875	NAZARA, JOEL (LE)	561.77
EE070883	VERIZON WIRELESS-KAWAIHAE	534.03
EE071211	SABARRE, LAWRENCE (RLOC)	49.32
EE071612	CARVALHO, SAMUEL (SSPP LE)	518.08
EE071953	FREEMAN, DANNY	671.20
EE072156	TAKO TACO TWO	55.74
	Total transferred to EE021419 in 2005 (con't.)	
Work Order #	Work Order Description	Amount
EE072524	WYKOWSKI, GARRET (LE)	1,034.38
EE072789	HUMBLE, KERRY & MARNIE	1,331.36
EE073274	SMITH, JACOB (SSPP LE)	313.20
EE075047	BASQUE, DAVID (LE)	256.50
EE075365	HALE KUI PARTNERS LLC	104.22
EE075367	HALE KUI PLAZA (SVC)	166.50
TD001677	REMEDY LOW PRI & SEC KAAWLOA	387.68
TD002968	DESIGN REMOVE ANCHOR ROD KAINALIU	70.16
TD011483	RPL LEANING P25 MANA LINE MEALANI RD	257.17
WH845100	COLL ENG KONA HIGHLANDS S/D SECT B KALAO	511.49
WH890100	RPRHTCO JP96-248	2,763.20
WI579100	COLL ENG RPR REEF PARKWAY HOVE KAU TC #8	2,669.00
WI835100	RPR Kohala (WRO #135, 136 & 137)	4,765.21
	Total transferred to EE021419 in 2005	98,270.71

Hawaii Electric Light Company, Inc.
Projects Abandoned In 2002
Costs Charged in Error to Customer Engineering Clearing

<u>Workorder No.</u>	<u>Workorder Description</u>	<u>Amount charged in error to clearing</u>	<u>Should have been expensed to Workorder no.</u>
ee007997	RPR S. Kohala	\$ 52.17	ee021415
ee007998	RPR S. Kohala	52.17	ee021415
	Sub-total	<u>\$ 104.34</u>	ee021415
ee031575	Kaumana Fiber Optics Ductline	\$ 779.60	ee021418
ee031767	Kaumana/Panaewa Fiber Optics	737.55	ee021418
ee031687	Waiakea Fiber Optics Ductline	960.23	ee021418
ee006848	Smith, Kathleen Ann	1,572.53	ee021418
ee020147	Keaau-Pahoia Hwy 130-Reconductor 12kv	2,446.80	ee021418
ee018848	Phillips, Judy LE	4,977.58	ee021418
ee008814	Mauna Kea Ranch Mgr Hse LE	3,061.66	ee021418
ee008956	Shoemaker, Robert LE	3,872.25	ee021418
ee015286	Dr. James Lambeth - Tranf Inst Design	351.70	ee021418
ee028125	Buyers, Doc Svc	201.30	ee021418
ee023608	Abella, Bernaldo	73.32	ee021418
ee010727	Freehill, Patrick	186.98	ee021418
ee018300	Souza, Charles M	534.83	ee021418
ee020431	San, Jake	461.75	ee021418
ee020188	Yuen, Leilehua	154.68	ee021418
ee014896	Tanaka, Leonard	242.57	ee021418
ee024477	Puna Certified Nursery	146.64	ee021418
ee018903	Paiva, Albert	305.82	ee021418
ee008395	Chandler, Judith LE	1,631.05	ee021418
ee016800	Okano, David	933.62	ee021418
ee014830	Tanaka, Leonard	1,443.90	ee021418
ee021469	Kroll, Michael LE	981.27	ee021418
ee023919	Moser Inc	73.32	ee021418
ee014029	Balmilero, Paterno	88.94	ee021418
ee022546	Gerrish, Grant	73.32	ee021418
ee013769	Deluz, Jason K	681.67	ee021418
ee011519	Deluz, Milton	178.22	ee021418
ee012213	Sakurai, Laurene M	2,093.43	ee021418
ee012639	Quiamas, Gene B	314.88	ee021418
ee028359	Brilhante, Chris LE	2,304.47	ee021418
ee024043	CH Annex Bldg ADA Improvement	617.88	ee021418
ee009008	Orchid Isle Rubsh & Recycl LE	4,302.77	ee021418
ee008870	Orchid Isle Rubsh & Recycl LE	154.47	ee021418
ee023985	Shropshire, Steve H	2,712.81	ee021418
ee023856	Giese, Robert	3,935.69	ee021418
ee029332	Johnson, Marcia LE	947.32	ee021418
ee031311	Kela, Colleen - Reloc LE	248.42	ee021418
ee015618	Fern Acres Comm Assn LE	7,985.96	ee021418
ee020590	Figueroa, Raymond LE-D	2,028.95	ee021418

Hawaii Electric Light Company, Inc.
Projects Abandoned in 2002
Costs Charged in Error to Customer Engineering Clearing

<u>Workorder No.</u>	<u>Workorder Description</u>	<u>Amount charged in error to clearing</u>	<u>Should have been expensed to Workorder no.</u>
ee009388	Chesco Corporation	400.56	ee021418
ee029218	Stanslowski, Adam & Ordonis, J	1,256.04	ee021418
ee018134	Kurtistown 2nd Feeder	4,596.67	ee021418
ee019461	Haw'n Bch's Sub (Eliminate)	6,486.58	ee021418
ee024057	Paris, Dwight R SSPP LE	2,988.13	ee021418
ee022974	Duenas, Peggy A SSPP LE	2,772.11	ee021418
ee021458	Island Fruits	1,589.45	ee021418
ee021710	Island Fruits	1,760.34	ee021418
ee012858	Jamison, Jasper	178.22	ee021418
ee012911	Jamison, Jasper LE	884.65	ee021418
ee012287	Esposito, Vincent LE-D	1,633.71	ee021418
ee016165	Rechtman, Bob	334.91	ee021418
ee017339	Kaneshiro & Sons Entr	2,016.40	ee021418
ee028259	Masaki, Alicia LE-D	840.95	ee021418
ee029264	Carter, Ron LE	552.72	ee021418
ee028150	Bass, Ruth Marie SSPP LE	3,025.25	ee021418
ee006197	Doctolero, Guillermo	181.14	ee021418
ee017944	Furtado, Antone/Kathleen	394.90	ee021418
ee023501	Cantan, Shellford	293.28	ee021418
ee014235	Ferguson Jr, William	259.97	ee021418
ee021609	Naha, Norman W	146.64	ee021418
ee011451	Yoza, Allan	816.03	ee021418
ee011453	Gray, John	178.22	ee021418
ee011579	Gray, John - Transformer Installation	164.65	ee021418
ee008264	Johnson, Billy W	246.68	ee021418
ee017857	Shiroma, Joyce	113.91	ee021418
ee002178	Puhi Bay Beach Store	630.64	ee021418
ee009611	Andrade, Alfred	251.52	ee021418
ee006690	HCEOC - Honey Processing Plant	963.95	ee021418
ee007053	HCEOC - Honey Processing Plant LE	5,410.92	ee021418
ee004568	Western Wireless-Honokaa/Kaipu	3,934.11	ee021418
ee022595	Awai, Rae Lee	146.64	ee021418
	Sub-total	<u>\$ 100,250.04</u>	ee021418
ee031298	Esmailzadeh, Roy LE	\$ 582.47	ee021419
ee009647	Matsumoto, Kazu	407.56	ee021419
ee026405	Loves Gift Shop Svc	214.31	ee021419
ee029607	Stringer, Donald LE	267.66	ee021419
ee000563	Sindlinger, Darlene SSPP	634.47	ee021419
ee029373	Sayre, Frank SVC	9.35	ee021419
ee023718	Kona Mazda Pavillion	94.63	ee021419
ee031103	Folan, James (SVC)	75.22	ee021419
ee030326	Tisdell, Russell (SVC)	115.98	ee021419

**Hawaii Electric Light Company, Inc.
Projects Abandoned in 2002
Costs Charged in Error to Customer Engineering Clearing**

<u>Workorder No.</u>	<u>Workorder Description</u>	<u>Amount charged in error to clearing</u>	<u>Should have been expensed to Workorder no.</u>
ee018640	Bobb, Walter	170.36	ee021419
ee030374	Pukalani Rd Ph2 (RLOC)-D	215.18	ee021419
ee012489	Kinney, Bill SSPP	1,058.84	ee021419
ee013014	Tincher, Richard	965.90	ee021419
ee016743	Tincher, Richard - Prewire & Set Meter	75.12	ee021419
ee016994	North Kohala Land Co - LE D	1,929.66	ee021419
ee003960	Snow, BL	13.80	ee021419
ee000559	Ilgan, John	128.94	ee021419
ee000557	Fernandez, Narcisco	230.31	ee021419
ee008346	David, Mildred	192.60	ee021419
ee016727	University of the Nations	82.35	ee021419
ee023557	NELH Infrastructure Additions - Insp	112.44	ee021419
ee025973	Barnes, Susan LE	113.37	ee021419
ee022714	Tanaka, John	519.76	ee021419
ee028773	Hualalai Dev LE	2,424.28	ee021419
ee026589	McGann, Brian (SVC) - D	80.25	ee021419
ee025603	Central Kona Ctr Bldg LE	838.98	ee021419
	Sub-total	<u>\$ 11,553.79</u>	ee021419
Total that should have been expensed		<u>\$ 111,908.17</u>	

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Ref: T-9, pages 36-38 & 121-125, & HELCO-923 (Human Resources Suite).

Page 36 indicates that \$134,000 of the increase in HECO charges in Account 923.03 is associated with HELCO's share of the HRS project's Phase 1 costs. Please provide the following:

- a. Page 36 attributes \$134,000 of the increase to HRS. Does the \$134,000 represent 100% of the HRS related costs charged to Account 923.03 in the 2006 test year forecast or only the increase over the HRS amounts charged to Account 923.03 in 2005? Please explain and provide a copy of any supporting documentation.
- b. Page 124 states that a planned project, such as HRS, could be implemented in multiple phases with each phase potentially having Stage 1 costs that would be charged to expense. Please provide the following:
 1. If different from Exhibit A in Docket No. 2006-0003, please provide the charged total estimated cost of HRS, broken down between each identifiable and discrete phase.
 2. Referring to Exhibit A in Docket No. 2006-0003 and part (b)(1) of this information request, it does not appear that the costs have been segregated by phase and stage. Rather, only the classifications of costs have been segregated by phase. Please provide a further breakdown of the most recently estimated costs attributed to each phase between each anticipated stage.
 3. Referring to part (b)(1) of this information request, please identify the expected start date and completion date for each phase.
- c. Did HELCO include any HRS related costs in rate base? If so, please provide a reference to the specific exhibit and workpaper showing the quantification of such amount.

HELCO Response:

- a. There was \$17,000 in HRS related costs charged to Account No. 923.03 in 2005. At the time HELCO T-9 was filed, the \$134,000 represented 100% of the HRS related costs included in Account No. 923.03 for the test year. The \$134,000 is \$117,000 more than the \$17,000 of HRS related costs charged to Account No. 923.03 in 2005.

- b.1. Exhibit A in Docket No. 2006-0003 provides the estimated total costs for the HRS project by company, cost type and phase. Please note that HELCO, HECO and MECO are currently in negotiations with the Consumer Advocate with respect to Docket No. 2006-0003 and anticipate changes to the project cost estimates as a result of such negotiations. HELCO will provide updated total project cost estimates as soon as practicable after the conclusion of such negotiations.
- b.2. The requested information is shown on pages 4-6. Page 4 shows HELCO's portion of the total (all years) cost of the HRS project by cost type, phase and stage. The costs on page 4 "tie" to the information on Exhibit A in Docket No. 2006-0003. The project consists of Phases 1 and 2. The total project costs are estimated to be incurred primarily over two years, once PUC approval is received, and HELCO's estimated portion of the total project costs is \$834,000.

Page 5 shows HELCO's portion of the 2006 cost of the HRS project. The costs include amounts to be deferred (\$439,000) and amounts to be expensed (\$158,000, i.e. \$151,000 of expense – not reengineering and \$7,000 of expense – reengineering). The costs include amounts incurred directly by HELCO's employees and amounts billed from HECO to HELCO for the HRS project. The \$158,000 of expense for 2006 includes \$134,000 of billings from HECO, and \$24,000 of HELCO internal labor and related on-costs charged to account no. 920 – A&G Salaries.

Page 6 shows the \$134,000 of 2006 billings from HECO to HELCO for the HRS project. The billing amounts are included in A&G Account No. 923.03 – Services from Associated Companies. Please note that the \$134,000 includes both Phase 1 and Phase 2

costs, not just Phase 1 costs as stated in error on page 37 of HELCO T-9, beginning on line 13.

As discussed in the Company's response to part b.1. above, please note that HELCO, HECO and MECO are currently in negotiations with the Consumer Advocate with respect to Docket No. 2006-0003 and anticipate changes to the project cost estimates as a result of such negotiations. HELCO will provide updated cost estimates for 2006 charges to Account No. 923.03 as soon as practicable after the conclusion of such negotiations.

- b.3. In the context of the Company's response to part b.1. of this information request, Phase 1 of the HR Suite project was forecast to run from May through November 2006, and Phase 2 was forecast to run from December 2006 through June 2007. As discussed above, HELCO is currently in negotiations with the Consumer Advocate with respect to Docket No. 2006-0003. HELCO will update the expected start date and completion date for each phase as soon as practicable after the conclusion of such negotiations, based on the outcome of those negotiations.
- c. No. As stated on HELCO T-9, page 37, beginning on line 19, since Phase 1 of the Human Resources Suite project is not expected to be completed in 2006, there are no estimates of deferred/amortized software project costs (Stage 2 costs) reflected in HELCO's test year 2006 rate base or expense estimates.

**HELCO'S PORTION OF TOTAL (ALL YEARS) COST for HR SUITE PROJECT
By Cost Type, Phase & Stage**

(\$ Thousands')

HELCO Cost for the HR Suite	Capital Deferred Expense	Cost Type	Phase 1				Phase 2				Project Total
			Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total	
Deferred	LABOR		\$ 21		\$ 21		\$ 19		\$ 19	\$ 40	
	OVERHEAD		\$ 12		\$ 12		\$ 10		\$ 10	\$ 22	
	O/S SVC		\$ 194		\$ 194		\$ 120		\$ 120	\$ 314	
	OTHER		\$ 155		\$ 155		\$ 22		\$ 22	\$ 177	
	AFUDC		\$ 19		\$ 19		\$ 6		\$ 6	\$ 25	
	TOTAL		\$ 401		\$ 401		\$ 177		\$ 177	\$ 578	
Expense - Not Reengineering	LABOR	\$ 19	\$ 14	\$ 13	\$ 46	\$ 15	\$ 20	\$ 4	\$ 39	\$ 84	
	OVERHEAD	\$ 11	\$ 12	\$ 9	\$ 32	\$ 8	\$ 15	\$ 4	\$ 27	\$ 59	
	O/S SVC	\$ 30	\$ 9	\$ 17	\$ 56	\$ 16	\$ 18		\$ 34	\$ 91	
	OTHER		\$ 3	\$ 3	\$ 6		\$ 1		\$ 1	\$ 7	
	TOTAL	\$ 60	\$ 38	\$ 42	\$ 140	\$ 39	\$ 54	\$ 8	\$ 101	\$ 241	
Expense - Reengineering	LABOR			\$ 4	\$ 4	\$ 5			\$ 5	\$ 9	
	OVERHEAD			\$ 3	\$ 3	\$ 3			\$ 3	\$ 6	
	TOTAL			\$ 7	\$ 7	\$ 8			\$ 8	\$ 15	
TOTAL	TOTAL	\$ 60	\$ 439	\$ 49	\$ 548	\$ 47	\$ 231	\$ 8	\$ 286	\$ 834	

1. The detail amounts are rounded which may cause differences in the totals.

HELCO'S PORTION OF 2006 COST for HR SUITE PROJECT
By Cost Type, Phase & Stage

(\$ Thousands¹)

	Capital Deferred Expense	Cost Type	Phase 1				Phase 2				Project Total
			Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total	
HELCO Project Cost for 2006	Deferred	LABOR		\$ 21		\$ 21					\$ 21
		OVERHEAD		\$ 12		\$ 12					\$ 12
		O/S SVC		\$ 194		\$ 194		\$ 16		\$ 16	\$ 210
		OTHER		\$ 155		\$ 155		\$ 22		\$ 22	\$ 177
		AFUDC		\$ 19		\$ 19					\$ 19
		TOTAL		\$ 401		\$ 401		\$ 38		\$ 38	\$ 439
	Expense - Not Reenginee ring	LABOR	\$ 19	\$ 14	\$ 7	\$ 40	\$ 8			\$ 8	\$ 48
		OVERHEAD	\$ 11	\$ 12	\$ 5	\$ 28	\$ 5			\$ 5	\$ 33
		O/S SVC	\$ 30	\$ 8	\$ 18	\$ 56	\$ 6	\$ 5		\$ 11	\$ 67
		OTHER		\$ 3		\$ 3					\$ 3
		TOTAL	\$ 60	\$ 37	\$ 30	\$ 127	\$ 18	\$ 5		\$ 24	\$ 151
	Expense - Reenginee ring	LABOR			\$ 4	\$ 4					\$ 4
		OVERHEAD			\$ 3	\$ 3					\$ 3
		TOTAL			\$ 7	\$ 7					\$ 7
	TOTAL	TOTAL	\$ 60	\$ 438	\$ 37	\$ 535	\$ 18	\$ 43		\$ 61	\$ 596

1. The detail amounts are rounded which may cause differences in the totals.

Note that the \$158,000 of expense for 2006 (\$151,000 + \$7,000 under Project Total Column) includes \$134,000 of billings from HECO (charged to Account No. 923.03 as shown on page 6), and \$24,000 of HELCO internal labor and related on-costs charged to Account No. 920-A&G Salaries.

**2006 HECO BILLINGS TO HELCO FOR HR SUITE PROJECT
By Phase & Stage (Charged to Account 923.03)**

(\$ Thousands¹)

	Capital Deferred Expense	Cost Type	Phase 1				Phase 2				Project Total	
			Stage		Stage		Stage		Stage			
			Stage 1	2	3	Total	1	2	3	Total		
HELCO Acct 923.03 for 2006	Expense - Not Reengine ering	LABOR	\$ 19	\$ 5	\$ 6	\$ 30	\$ 8			\$ 8	\$ 38	
		OVERHEAD	\$ 11	\$ 3	\$ 4	\$ 18	\$ 5			\$ 5	\$ 23	
		O/S SVC	\$ 30	\$ 8	\$ 18	\$ 56	\$ 6	\$ 5		\$ 11	\$ 67	
		OTHER										
		TOTAL	\$ 60	\$ 17	\$ 28	\$104	\$ 18	\$ 5		\$ 24	\$ 128	
	Expense Reengine ering	LABOR			\$ 4	\$ 4					\$ 4	
		OVERHEAD			\$ 3	\$ 3					\$ 3	
		TOTAL			\$ 7	\$ 7					\$ 7	
	TOTAL		TOTAL	\$ 60	\$ 17	\$ 35	\$111	\$ 18	\$ 5		\$ 24	\$ 134

1. The detail amounts are rounded which may cause differences in the totals.